

1 IN THE UNITED STATES DISTRICT COURT
2 FOR THE EASTERN DISTRICT OF TEXAS
2 MARSHALL DIVISION

3 UNITED STATES AUTOMOBILE) (
3 ASSOCIATION)
4) (CIVIL ACTION NO.
5 VS.) (2:18-CV-245-JRG
6) (MARSHALL, TEXAS
7 WELLS FARGO BANK, N.A.) (OCTOBER 31, 2019
7) (1:07 P.M.

8

9 TRANSCRIPT OF JURY TRIAL

10 AFTERNOON SESSION

11 BEFORE THE HONORABLE CHIEF JUDGE RODNEY GILSTRAP,

12 UNITED STATES DISTRICT JUDGE

13 APPEARANCES:

15 FOR THE PLAINTIFF:

16 JASON SHEASBY
17 ANTHONY ROWLES
18 LISA GLASSER
18 IRELL & MANELLA
19 1800 Avenue of the Stars
19 Suite 900
20 Los Angeles, CA 90067-4276

21 ROBERT CHRISTOPHER BUNT
22 PARKER, BUNT & AINSWORTH, PC
23 100 East Ferguson
23 Suite 418
24 Tyler, TX 75702

25

1 FOR THE DEFENDANT:

2
3 THOMAS M. MELSHEIMER
4 M. BRETT JOHNSON
5 MICHAEL A. BITTNER
6 J. TRAVIS UNDERWOOD
7 WINSTON & STRAWN LLP
8 2121 North Pearl Street
9 Suite 900
10 Dallas, TX 75201

11 E. DANIELLE T. WILLIAMS
12 WINSTON & STRAWN LLP
13 300 South Tyron Street
14 16th Floor
15 Charlotte, NC 28202

16 MATTHEW R. MCCULLOUGH
17 WINSTON & STRAWN LLP
18 275 Middlefield Road
19 Suite 205
20 Menlo Park, CA 94025

21 JACK WESLEY HILL
22 WARD, SMITH & HILL, PLLC
23 P.O. Box 1231
24 1507 Bill Owens Parkway
Longview, TX 75606

25
26 COURT REPORTER: Shelly Holmes, CSR, TCRR
27 Official Court Reporter
28 United States District Court
29 Eastern District of Texas
30 Marshall Division
31 100 E. Houston
32 Marshall, Texas 75670
33 (903) 923-7464

34
35 (Proceedings recorded by mechanical stenography, transcript
36 produced on a CAT system.)

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01:07:00 1 P R O C E E D I N G S

01:07:00 2 (Jury out.)

01:07:25 3 COURT SECURITY OFFICER: All rise.

01:07:28 4 THE COURT: Be seated, please.

01:08:09 5 Counsel, I understand you're still talking about

01:08:16 6 the issues we discussed in chambers this morning. We'll --

01:08:22 7 I'll circle back and see where you are on those during the

01:08:25 8 afternoon recess.

01:08:26 9 MR. SHEASBY: If it pleases the Court, Your Honor,

01:08:29 10 yes.

01:08:29 11 THE COURT: All right. I'll do that.

01:08:31 12 All right. Are we ready to continue?

01:08:33 13 MR. MELSHEIMER: We are.

01:08:35 14 THE COURT: Let's bring in the jury.

01:08:36 15 (Jury in.)

01:08:40 16 COURT SECURITY OFFICER: All rise.

01:08:41 17 THE COURT: Welcome back, ladies and gentlemen.

01:09:04 18 Please have a seat.

01:09:05 19 We'll continue with the Defendant's

01:09:10 20 cross-examination of Professor Tom Conte.

01:09:15 21 Mr. Melsheimer, you may continue.

01:09:17 22 MR. MELSHEIMER: May it please the Court, Your

01:09:17 23 Honor.

01:09:17 24 THOMAS CONTE, PH.D., PLAINTIFF'S WITNESS, PREVIOUSLY SWORN

01:09:17 25 CROSS-EXAMINATION CONTINUED

01:09:18 1 BY MR. MELSHEIMER:

01:09:18 2 Q. Good afternoon, Dr. Conte.

01:09:20 3 A. Good afternoon.

01:09:21 4 Q. Let's return, if we can, to the claim language, sir,

01:09:27 5 and we're going to go to Claim 1 of the '571 patent.

01:09:29 6 Do you see it displayed in front of you, sir?

01:09:33 7 A. I do.

01:09:34 8 Q. And this is one of the independent claims that you

01:09:37 9 analyzed for infringement purposes, true?

01:09:40 10 A. True.

01:09:41 11 Q. There are some dependent claims that include this

01:09:48 12 claim, correct?

01:09:49 13 A. Correct.

01:09:50 14 Q. But we know that if there's an -- if there's -- if an

01:09:57 15 element is not satisfied in the independent claim, then, by

01:10:01 16 definition, there can't be infringement of the dependent

01:10:06 17 claim. Do I have that right?

01:10:13 18 A. I'm a little fuzzy on that, but I believe that's true.

01:10:15 19 Q. So just to make sure we're on the same page, so my

01:10:19 20 question, I'll try to make it more precise.

01:10:21 21 If a claim element is missing in an infringement

01:10:26 22 analysis from the independent claim, then, by definition,

01:10:32 23 the dependent claim cannot be infringed, right?

01:10:36 24 A. Generally, that's true, yes.

01:10:38 25 Q. This claim is described in the very first words as

01:10:44 1 being software, right?

01:10:47 2 A. Yes.

01:10:50 3 Q. That's what the phrase, a non-transitory computerable

01:10:58 4 reader -- readable medium comprising computer-readable

01:11:02 5 instructions, that's essentially -- that's software code,

01:11:05 6 right?

01:11:05 7 A. Yes.

01:11:06 8 Q. That's one of the reasons why when you did your work in

01:11:10 9 this case, the first thing you studied and what you spent

01:11:20 10 the most time on was the source code, right?

01:11:21 11 A. What I spent the most time on, yes.

01:11:23 12 Q. Okay. I mean, you looked at the claims, of course,

01:11:26 13 right, and you studied them?

01:11:29 14 A. Yes.

01:11:29 15 Q. Understood what the Court's definitions were, and then

01:11:32 16 you -- you threw yourself into the code with the help of

01:11:39 17 these two reviewers, who I think you told us before lunch

01:11:43 18 may have spent over a hundred hours, along with your 40

01:11:46 19 hours, looking at the source code to figure out how it

01:11:49 20 operated, right?

01:11:50 21 A. So, generally, that's true.

01:11:56 22 Q. Now, you -- you understand that the -- the argument

01:12:07 23 between the two sides here is the timing of capture, right?

01:12:09 24 A. Yes, generally, I believe that's the -- one of the

01:12:16 25 issues.

01:12:16 1 Q. Well, if you look up in your report, sir, on
01:12:21 2 Paragraph 420, you say -- tell me when you get there.
01:12:27 3 A. You can start reading while I -- while I go.
01:12:30 4 Q. It appears that Wells Fargo is arguing that in its
01:12:34 5 system, capture occurs earlier in the process. Do you see
01:12:40 6 that?
01:12:42 7 A. That was my understanding.
01:12:44 8 Q. And that's still your understanding, right?
01:12:48 9 A. My understanding is that -- now that Wells Fargo is
01:12:53 10 arguing, it just doesn't happen after.
01:12:56 11 Q. And that's this -- this -- this "when" phrase, that's
01:13:01 12 the timing condition in the patent based on the word
01:13:05 13 "when," right?
01:13:07 14 A. Correct.
01:13:07 15 Q. And the Court has defined that to mean at or after,
01:13:10 16 right?
01:13:10 17 A. Yes.
01:13:14 18 Q. So the other thing I wanted to mention to you about
01:13:17 19 this claim, we've talked about this a little bit before
01:13:19 20 lunch, is that the capture is happening with the camera,
01:13:27 21 right?
01:13:27 22 A. Yes.
01:13:28 23 Q. There are slightly different terms used in the various
01:13:34 24 patent claims, but, effectively, the capture in all these
01:13:39 25 claims is happening with the camera using the camera. It's

01:13:43 1 that concept that the image is captured with the camera and
01:13:48 2 not something else, right?

01:13:51 3 A. I need to check the claims, but I believe that's
01:13:54 4 accurate.

01:13:55 5 Q. It's not -- and I'm not -- I'm not trying to be
01:14:00 6 sarcastic -- it's not capturing with the bank's server,
01:14:06 7 right?

01:14:06 8 A. That's correct.

01:14:08 9 Q. It may be that ultimately in the process, the checks
01:14:16 10 end up being stored on the server, true?

01:14:18 11 A. That's correct.

01:14:20 12 Q. But the capturing that these claims require has to
01:14:27 13 happen with the camera; do I have that right?

01:14:30 14 A. That's what the claim says.

01:14:33 15 Q. That's what we have to follow, as well, isn't it right,
01:14:38 16 sir, what the claims say?

01:14:39 17 A. Yes.

01:14:40 18 Q. Now, you were here for the opening statement -- let
01:14:54 19 me -- actually let me -- let me back up. I want to get
01:14:59 20 back to this discussion we were having about memory,
01:15:05 21 non-volatile memory versus volatile memory. Remember that
01:15:07 22 discussion we had?

01:15:08 23 A. Yes.

01:15:09 24 Q. There are two -- generally, there's two kinds of
01:15:14 25 memory, there's memory that's more permanent memory and

01:15:17 1 there's memory that's volatile memory. Is that a fair way
01:15:20 2 of putting it?

01:15:21 3 A. Generally, yes.

01:15:22 4 Q. Sometimes called non-volatile or volatile, right?

01:15:27 5 A. Right.

01:15:28 6 Q. You and I had this conversation a little bit before
01:15:30 7 lunch that, you know, volatile memory doesn't mean that,
01:15:37 8 for example, if you have something on your phone and you
01:15:39 9 shake it, that the data is just going to disappear. That's
01:15:43 10 not what volatile means, right?

01:15:45 11 A. In general, that's true.

01:15:46 12 Q. Okay. And, in fact, you and I talked about that
01:15:51 13 volatile memory, something can exist in volatile memory for
01:15:55 14 an extended period of time or -- or it cannot, right?

01:16:01 15 A. In certain situations, yes.

01:16:02 16 Q. And I just wanted to make sure I was clear about this.
01:16:06 17 It's not that volatile memory necessarily means that
01:16:12 18 something is not going to be there for 10, 15, 20 minutes,
01:16:18 19 an hour, it could be in volatile memory for hours, and
01:16:21 20 still be volatile memory, right?

01:16:22 21 A. Hypothetically, yes.

01:16:24 22 Q. One of the things that separates volatile memory from
01:16:30 23 non-volatile memory, as I understand it, sir, is that
01:16:36 24 volatile memory, if the power source goes away, what's
01:16:42 25 stored in non-volatile memory will disappear; is that true?

01:16:46 1 A. That's one scenario, yes.

01:16:47 2 Q. There are other scenarios, but that is one, correct?

01:16:52 3 A. Correct.

01:16:53 4 Q. If it's non-volatile memory, what that means is that

01:16:58 5 the power goes away or goes down, and you plug it back in,

01:17:04 6 you still got the data there in memory, right?

01:17:09 7 A. Again, that's one scenario.

01:17:11 8 Q. And, for example, the -- your book -- the book that you

01:17:16 9 edited or oversaw the supplement for, that is something

01:17:23 10 that's stored on a -- on permanent memory in a CD, right?

01:17:33 11 A. Correct, there's no power there.

01:17:35 12 Q. Correct. And so, in fact, whether -- I don't know if

01:17:37 13 this is a CD-ROM or a DVD, but in any event, both of those

01:17:42 14 are ways of storing things that are permanent, right?

01:17:52 15 A. Generally I would agree.

01:17:54 16 Q. And, of course, sir -- maybe you're hesitating for this

01:17:58 17 reason. Of course you could, you know, heat this up or do

01:18:02 18 something to it that might disrupt the storage, but

01:18:06 19 generally speaking, something like a CD or a DVD is what we

01:18:11 20 would call permanent memory, right?

01:18:13 21 A. That's one example.

01:18:14 22 Q. The claims of these patents, the claims of these

01:18:20 23 patents do not contain the words volatile or non-volatile

01:18:24 24 memory, correct?

01:18:24 25 A. The claims do not, no.

01:18:28 1 Q. The claims of these patents do not contain the word
01:18:35 2 JPEG, true?

01:18:35 3 A. The claims do not.

01:18:36 4 Q. You were here for the opening statement, correct?

01:18:58 5 A. For most of it, yes.

01:19:01 6 Q. And were you here for the Plaintiff's opening
01:19:06 7 statement?

01:19:06 8 A. Yes.

01:19:07 9 Q. So I'd like to put up a portion of that and ask you a
01:19:10 10 question about it.

01:19:14 11 MR. MELSHEIMER: Mr. Barnes, do we have that
01:19:17 12 excerpt?

01:19:18 13 THE TECHNICIAN: Yes.

01:19:29 14 Q. (By Mr. Melsheimer) So this was said by the counsel
01:19:30 15 for the Plaintiff, and it's describing, as I understand it,
01:19:36 16 what the Plaintiff's infringement theory is.

01:19:38 17 They obtain those images, they rapidly monitor
01:19:44 18 them to determine if they satisfy the criteria for machine
01:19:47 19 reading, and then they create a JPEG file when the frame
01:19:52 20 passes.

01:19:55 21 Did I read that correctly?

01:19:56 22 A. That's what the transcript says, yes.

01:19:59 23 Q. And then at the end there, it says: That's what USAA
01:20:02 24 says is infringing.

01:20:04 25 Right?

01:20:06 1 A. That's what it says, yes.

01:20:07 2 Q. That's what you say is infringing?

01:20:09 3 A. Yes. This isn't quite as precise as I put it.

01:20:17 4 Q. Well, now, you've said that a number of times in your

01:20:20 5 testimony, sir, when -- sometimes in response to my

01:20:23 6 questions about the words being -- not being precise,

01:20:26 7 right?

01:20:26 8 A. Yes, I'm an engineer.

01:20:30 9 Q. Of course. And -- and, for example, that slide that

01:20:33 10 said Patented Monitoring Criteria, you said, well, that

01:20:36 11 really wasn't right because those criterions weren't

01:20:39 12 patented, remember that, at the way beginning of your

01:20:41 13 cross-examination?

01:20:41 14 A. Yes, although, I think -- again, that was confusing

01:20:51 15 because of my understanding of patent law.

01:20:53 16 Q. And there -- there have been some other observations

01:20:56 17 that you've made about precision and wording, including

01:21:00 18 some of your own wording, right?

01:21:01 19 A. No, that's inaccurate.

01:21:05 20 Q. So you haven't criticized some of your own wording

01:21:09 21 during your testimony in front of the jury; you haven't

01:21:11 22 criticized some of that in your previous writings as

01:21:15 23 imprecise?

01:21:18 24 A. No, I have not.

01:21:19 25 Q. Okay. Let me put it this way, sir: Can we at least

01:21:23 1 agree that precision in words is part of the reason why
01:21:30 2 we're here, right?

01:21:31 3 A. Among many others, yes.

01:21:34 4 Q. And in a patent case, precision in words are -- is
01:21:39 5 important, isn't it, sir?

01:21:40 6 A. Yes.

01:21:41 7 Q. We have to use -- in some instances, special
01:21:45 8 definitions, right?

01:21:46 9 A. Yes.

01:21:48 10 Q. And in some instances, we have to rely on the ordinary
01:21:52 11 meaning of people with skill in the field to tell us what
01:21:56 12 those words mean, correct?

01:21:58 13 A. That's correct.

01:22:00 14 Q. Now, can we agree that -- can we agree, sir, that the
01:22:20 15 word "obtain" -- the word "obtain" does not appear in any
01:22:29 16 of the patent claims asserted in this case?

01:22:37 17 A. The word "obtain" does not, no, in the claims, no.

01:23:01 18 MR. MELSHEIMER: You can take that down,
01:23:02 19 Mr. Barnes.

01:23:03 20 Q. (By Mr. Melsheimer) I want to talk a little bit about
01:23:07 21 the improvement in smartphone cameras over time and the
01:23:15 22 changes in the Mitek software. Are you with me?

01:23:17 23 A. Yes.

01:23:17 24 Q. Can we -- so just to orient ourselves, the first of the
01:23:22 25 Plaintiff's patents was filed on -- in 2009, is that --

01:23:28 1 does that sound right?

01:23:29 2 A. Yes.

01:23:29 3 Q. And it was granted in 2015. Does that sound right to

01:23:33 4 you?

01:23:34 5 A. I believe so, yeah.

01:23:36 6 Q. The first iPhone came out in 2007, right?

01:23:43 7 A. Yes.

01:23:44 8 Q. You know, though, that there were devices prior to the

01:23:49 9 smartphone that had what we would call some smartphone-type

01:23:54 10 capabilities, right?

01:23:55 11 A. Yes.

01:23:56 12 Q. Such as the BlackBerry, right?

01:23:59 13 A. Yes.

01:24:00 14 Q. And other devices that predate the 2007 introduction of

01:24:06 15 the iPhone, correct?

01:24:08 16 MR. ROWLES: Your Honor, may we approach?

01:24:10 17 THE COURT: Approach the bench, counsel.

01:24:16 18 (Bench conference.)

01:24:18 19 MR. ROWLES: Your Honor, I feel we're getting

01:24:23 20 right back into the validity territory that you asked

01:24:25 21 counsel to move on from before lunch break.

01:24:27 22 MR. MELSHEIMER: Not at all, Judge.

01:24:28 23 THE COURT: Where are we going?

01:24:29 24 MR. MELSHEIMER: They made a specific point that

01:24:31 25 one of our charge -- the timeline that we showed to the

01:24:35 1 jury was incorrect. When I said that the first mobile
01:24:38 2 application was on a phone in 2007, Mr. Sheasby said to
01:24:46 3 their -- their very first witness, he said, well, that
01:24:49 4 can't be because the iPhone just came out in 2007.

01:24:51 5 And I'm just pointing out that that's not correct,
01:24:54 6 that there, in fact, were smartphones before that, and then
01:24:58 7 I'm done with this. But that was the direct point that he
01:25:00 8 made, Judge. I think I'm entitled to rebut it.

01:25:05 9 MR. ROWLES: Right. I think the cross-examination
01:25:08 10 of Mr. Bueche was the opportunity -- or recross, rather.

01:25:12 11 THE COURT: But that didn't happen with this
01:25:15 12 witness, though, did it? That happened with Bueche.

01:25:15 13 MR. MELSHEIMER: I understand, Your Honor. But
01:25:16 14 this witness -- I don't have to pick -- I can pick whatever
01:25:17 15 witness I want to illustrate a point. I'm not impeaching
01:25:21 16 him with this. I'm simply saying that what they tried to
01:25:24 17 argue with Mr. Bueche is incorrect. That's all.

01:25:27 18 THE COURT: All right. Mr. Melsheimer, one more
01:25:29 19 question, and then move on.

01:25:30 20 MR. MELSHEIMER: Thank you, Your Honor.

01:25:31 21 THE COURT: Okay. And do not go into validity.

01:25:33 22 MR. MELSHEIMER: Your Honor, I've -- I'm not going
01:25:35 23 to.

01:25:36 24 THE COURT: I'm just reminding you.

01:25:38 25 MR. MELSHEIMER: Thank you. Thank you, Your

01:25:39 1 Honor.

01:25:39 2 (Bench conference concluded.)

01:25:46 3 THE COURT: All right. Counsel, ask your next
01:25:48 4 question.

01:25:48 5 Q. (By Mr. Melsheimer) There were smartphones capable of
01:25:50 6 running apps before the iPhone, true?

01:25:53 7 A. That's true.

01:25:57 8 THE COURT: Let's move on.

01:25:58 9 Q. (By Mr. Melsheimer) Now, can we agree that the Mitek
01:26:03 10 software has changed over time?

01:26:08 11 A. Yes.

01:26:08 12 Q. And can we also agree that the smartphone technology,
01:26:14 13 including the camera technology, has changed from 2007 when
01:26:21 14 the iPhone was introduced and today?

01:26:24 15 A. Yes.

01:26:25 16 Q. The cameras have gotten a lot better, right?

01:26:30 17 A. Among other things, yes.

01:26:31 18 Q. The first iPhone didn't even have video, right?

01:26:34 19 A. That's correct.

01:26:35 20 Q. But now the cameras have very sophisticated video
01:26:41 21 capabilities that allow extremely high resolution images;
01:26:41 22 isn't that right?

01:26:49 23 A. Yes, that's correct.

01:26:49 24 Q. Are you aware whether or not Mitek's source code
01:27:16 25 changed over time to account for the greater capability of

01:27:26 1 the smartphone cameras?

01:27:32 2 A. There is a portion of the code that changed. It wasn't
01:27:35 3 relevant.

01:27:37 4 Q. Okay. So I want to make sure I understand your answer.

01:27:43 5 Was there -- are you aware whether the Mitek
01:27:49 6 source code changed over time, in part to account for the
01:27:57 7 expanded capabilities of the iPhone or smartphone cameras?

01:28:03 8 A. Again, there was change. It was not change that was
01:28:07 9 relevant to my analysis.

01:28:09 10 Q. Okay.

01:28:09 11 MR. MELSHEIMER: Your Honor, I'm going to object
01:28:11 12 as non-responsive because I don't think he's answering -- I
01:28:15 13 didn't ask him if it was relevant. I was simply asking him
01:28:18 14 if it was changed to reflect the improved capabilities of
01:28:22 15 the camera. I just would like to get an answer to that, if
01:28:24 16 possible.

01:28:25 17 THE COURT: Well, you've gotten an answer, but he
01:28:27 18 did go beyond the answer that your question called for.
01:28:31 19 I'll sustain the objection that -- after the witness says
01:28:34 20 "there was change," the part about it wasn't relevant,
01:28:38 21 that's non-responsive.

01:28:39 22 Let's proceed.

01:28:46 23 MR. MELSHEIMER: Your Honor, may I have just one
01:28:48 24 moment to consult with my co-counsel?

01:28:51 25 THE COURT: You certainly may.

01:29:02 1 (Pause in proceedings.)

01:29:02 2 MR. MELSHEIMER: May it please the Court.

01:29:04 3 Thank you, Dr. Conte.

01:29:05 4 THE COURT: You pass the witness, Mr. Melsheimer?

01:29:07 5 MR. MELSHEIMER: Pass the witness, Your Honor.

01:29:09 6 THE COURT: Is there redirect, Mr. Rowles?

01:29:12 7 MR. ROWLES: Yes, Your Honor.

01:29:13 8 THE COURT: Proceed with your redirect

01:29:18 9 examination, please, Mr. Rowles.

01:29:33 10 MR. ROWLES: Thank you, Your Honor.

01:29:33 11 REDIRECT EXAMINATION

01:29:34 12 BY MR. ROWLES:

01:29:34 13 Q. Hello again, Dr. Conte.

01:29:38 14 A. Hello.

01:29:40 15 MR. ROWLES: Mr. Huynh, if I could get

01:29:42 16 Paragraph 83 of Professor Conte's report, please.

01:29:51 17 Q. (By Mr. Rowles) While this is coming up,

01:29:58 18 Professor Conte, do you recall being asked some questions

01:30:00 19 about a large table in Paragraph 83 of your report? Do you

01:30:04 20 remember that?

01:30:04 21 A. I do.

01:30:07 22 Q. And --

01:30:11 23 MR. ROWLES: And, Mr. Huynh, do we need a moment?

01:30:14 24 We might just need a moment, Your Honor.

01:30:22 25 Next, please -- next page, please, Mr. Huynh.

01:30:26 1 Q. (By Mr. Rowles) So, Professor Conte, you remember
01:30:28 2 answering some questions about this table in your expert
01:30:31 3 report, right?
01:30:33 4 A. I do.
01:30:33 5 Q. Now, I want to direct your attention to the very top of
01:30:37 6 the table with the column headings. And can you tell me
01:30:40 7 what the column headings say?
01:30:41 8 A. On the left it says: Component. And on the right, it
01:30:46 9 says: Jobs Performed.
01:30:47 10 Q. And now if we look at the row labeled Mitek MiSnap on
01:30:53 11 mobile device, do you see that, second from the bottom?
01:30:55 12 A. Yes.
01:30:55 13 Q. And so what is -- what are the jobs performed being
01:30:59 14 described in this row of the table?
01:31:00 15 A. So this is defining -- this is listing the different
01:31:06 16 jobs that that module performs, including IQA threshold
01:31:13 17 checking, JPEG processing, image capture, corner tracking.
01:31:20 18 Q. And are these bullet points sequential steps?
01:31:27 19 A. Not at all.
01:31:30 20 Q. Now, the fourth bullet there says: Corners tracking.
01:31:30 21 Do you see that?
01:31:30 22 A. Yes.
01:31:30 23 Q. Does the Wells Fargo application do corner tracking or
01:31:34 24 corner detection at some point in the capture process?
01:31:36 25 A. It does. That's part of the analysis phase.

01:31:38 1 Q. And what phase of the process does that have?

01:31:41 2 A. That was that -- it happens after you -- I'm sorry. It

01:31:49 3 happens -- after the preview image is received, that's when

01:31:51 4 you do that analyze frame on samplebuffer.

01:32:00 5 Q. So it happens before the image is captured, fair?

01:32:03 6 A. That's correct.

01:32:10 7 MR. MELSHEIMER: Objection, leading, Your Honor.

01:32:10 8 THE COURT: Sustained.

01:32:10 9 MR. MELSHEIMER: Move that the answer be stricken.

01:32:11 10 THE COURT: Restate the question, counsel.

01:32:13 11 Q. (By Mr. Rowles) Professor Conte, when does corners

01:32:15 12 tracking happen in the Wells Fargo app relative to the

01:32:18 13 capture of images?

01:32:19 14 A. So it happens before the capture of images. It's part

01:32:23 15 of the -- evaluating the monitoring criteria. That's what

01:32:27 16 we saw. And then that result, that's where that, if result

01:32:32 17 was yes, and then capture -- capture happens after that

01:32:36 18 where you put the -- the Post-it on the door and you record

01:32:40 19 the time and you pop up the rectangle saying success and

01:32:43 20 then you encode the JPEG.

01:32:48 21 Q. And where is that bullet listed in this table?

01:32:50 22 A. So you'll see image capture is the first bullet. And

01:33:02 23 JPEG processing is the third bullet. And IQA threshold

01:33:10 24 detection, monitoring criteria, that is the second bullet.

01:33:13 25 So these are not in order. If I wanted them in order, I

01:33:16 1 would have numbered them and not used bullets.

01:33:18 2 Q. Now, counsel asked you some questions about the JPEG

01:33:21 3 processing, right?

01:33:22 4 A. Yes.

01:33:23 5 Q. Let me ask this: What -- you discussed in your direct

01:33:29 6 examination capture of a JPEG, correct?

01:33:32 7 A. Yes.

01:33:32 8 Q. Now, does anything happen to the JPEG check image after

01:33:38 9 it's captured in terms of processing?

01:33:40 10 A. Yes. You add extra metadata.

01:33:46 11 Q. And did you discuss that metadata in your expert report

01:33:50 12 somewhere else?

01:33:50 13 A. I did.

01:33:52 14 Q. Could you turn in your notebook to Paragraph 253 of

01:33:56 15 your expert report?

01:34:03 16 A. Here it is.

01:34:05 17 Q. And -- and what -- what do you see at Paragraph 253?

01:34:09 18 A. This is -- so I looked through each and every one of

01:34:14 19 the versions. Here there's a key on the next page.

01:34:17 20 P means present in the version. NP means not present.

01:34:23 21 U means version was unavailable to me. C means commented

01:34:28 22 out. UC means uncommented in version. "A" means added

01:34:33 23 in -- in version. And R means removed.

01:34:35 24 And what these are -- are that extra what we call

01:34:39 25 metadata added to the JPEG image. This includes things

01:34:44 1 such as the capture time so that the Wells Fargo server can
01:34:48 2 see the time.

01:34:49 3 Q. And does that metadata get added into the JPEG edit at
01:34:54 4 some point?

01:34:55 5 A. It get -- it gets added into the JPEG right after
01:34:58 6 it's -- it's transcoded.

01:35:05 7 MR. ROWLES: And, Mr. Huynh, if I could get
01:35:08 8 Slide 15, please?

01:35:25 9 Q. (By Mr. Rowles) Now, early -- earlier in your
01:35:27 10 cross-examination, you were asked a number of questions
01:35:29 11 about what the patent covers and does not cover. Do you
01:35:32 12 recall that?

01:35:32 13 A. Yes.

01:35:33 14 Q. So could you summarize for the jury what the asserted
01:35:38 15 patents are about?

01:35:38 16 A. So, again, these patents are about a processor
01:35:43 17 assessing -- assessing the image quality. That's that
01:35:49 18 monitoring criterion. It's about supplying corrected
01:35:53 19 feedback, move closer, hold steady. And it's about once
01:35:58 20 you pass that monitoring criteria, then automatically
01:36:03 21 capturing an image when the criteria is satisfied.

01:36:05 22 Q. And is that covered by the claims of the patents?

01:36:08 23 A. Yes, each and every one of those is covered by the
01:36:11 24 claims of the patent.

01:36:17 25 MR. ROWLES: Could you advance the slide,

01:36:19 1 Mr. Huynh? One more, please.

01:36:21 2 Q. (By Mr. Rowles) Now, you discussed this portion of the

01:36:25 3 specification in the direction examination, correct?

01:36:29 4 A. That's correct.

01:36:30 5 Q. And you were asked some questions by Wells Fargo's

01:36:35 6 counsel, Mr. Melsheimer, about the word "obtain." Do you

01:36:38 7 remember that?

01:36:39 8 A. Yes.

01:36:39 9 Q. And did you find the word "obtain" anywhere in the

01:36:43 10 patent specification?

01:36:45 11 A. It is in the patent specification multiple times. This

01:36:47 12 is one instance.

01:36:48 13 Q. And so what -- excuse me, I didn't mean to cut you off,

01:36:50 14 Professor Conte.

01:36:51 15 A. It's there in the next line, "obtained."

01:36:57 16 Q. And so what -- what is obtaining a frame? What part of

01:37:02 17 the invention is that describing?

01:37:03 18 A. That's describing monitoring the image in the field of

01:37:14 19 view of the camera.

01:37:15 20 Q. And does monitoring an image in the field of view of

01:37:21 21 the camera, does that appear in the claims of the patent?

01:37:23 22 A. It does.

01:37:25 23 MR. ROWLES: Can I get Slide 117, please,

01:37:28 24 Mr. Huynh?

01:37:29 25 Q. (By Mr. Rowles) Professor Conte, you were asked some

01:37:37 1 questions about this slide, as well. Do you remember that?

01:37:38 2 A. Yes.

01:37:38 3 Q. And could you tell the jury what is the header in

01:37:42 4 the -- in the top of the far left column of this table?

01:37:47 5 A. Monitoring criteria listed in the 5 -- in '571 patent.

01:37:52 6 Q. And what does that mean?

01:37:53 7 A. That means it's listed in the specification.

01:37:55 8 Q. And are these examples of monitoring criteria described

01:38:01 9 in the claim or recited in the claim?

01:38:03 10 A. The claim recites monitoring criteria. The

01:38:07 11 specification gives this list.

01:38:08 12 Q. And what are these monitoring criteria used for in the

01:38:12 13 Wells Fargo application?

01:38:14 14 A. They're used to determine whether or not the check is

01:38:19 15 suitable for presenting to a depository.

01:38:23 16 Q. Now, you were asked some questions about a bitmap in

01:38:27 17 comparison to a JPEG, at various points; do you remember

01:38:33 18 that?

01:38:33 19 A. Yes.

01:38:33 20 Q. And I think the example that was given was holding or

01:38:37 21 hovering a camera -- or the phone, excuse me, over a check

01:38:40 22 and a bitmap being read from an image sensor. Do you

01:38:43 23 recall that discussion?

01:38:44 24 A. Yes.

01:38:44 25 Q. Now, in that example where you have a bitmap read from

01:38:51 1 the image sensor over a check, does the system know whether
01:38:54 2 the monitoring criteria are satisfied or not?

01:38:56 3 A. No, not at that point.

01:38:59 4 Q. And why is that?

01:38:59 5 A. Because for each of those, once you obtain an image
01:39:06 6 that's being displayed, you have to then check the
01:39:10 7 monitoring criteria, that analyzeFrame:sampleBuffer.

01:39:16 8 Q. And what about the JPEG image, does the system know
01:39:19 9 whether or not the JPEG image satisfies the monitoring
01:39:23 10 criteria?

01:39:23 11 A. Yes, it does. You don't create the JPEG image until
01:39:26 12 after you satisfy the monitoring criteria.

01:39:35 13 MR. ROWLES: Mr. Huynh, if I could please get
01:39:46 14 Paragraph 412 from the expert report.

01:39:49 15 Q. (By Mr. Rowles) Now, you were asked a fair number of
01:39:51 16 questions about Paragraph 412 of your report, right,
01:39:55 17 Professor Conte?

01:39:55 18 A. Yes.

01:39:55 19 Q. And I want to direct your attention to the second full
01:39:58 20 sentence which begins: A JPEG check image is created and
01:40:01 21 transmitted. Do you see that?

01:40:03 22 A. Yes.

01:40:03 23 Q. Now, this is Paragraph 412 of the report, right?

01:40:07 24 A. Yes.

01:40:09 25 Q. Fair to say there are some other paragraphs in your

01:40:11 1 expert report, right?

01:40:12 2 A. More than a couple.

01:40:13 3 Q. Now, could you read -- could you turn in your book to
01:40:16 4 Paragraphs 251 and 252 for me? And just let me know when
01:40:20 5 you're there.

01:40:33 6 A. Yes, I'm there.

01:40:34 7 Q. Now, is the concept of creating a JPEG check image and
01:40:39 8 transmitting a check image discussed elsewhere in your
01:40:42 9 report other than Paragraph 412?

01:40:44 10 A. Yes, for example, in Paragraph 251.

01:40:48 11 Q. And could you read that heading above Paragraph 251?

01:40:54 12 A. Check image capture and preparation for transmission to
01:40:58 13 bank servers.

01:40:59 14 Q. And so what is -- what is -- what did you describe in
01:41:02 15 Paragraph 251 of your expert report?

01:41:06 16 A. So I describe that once the processor determines that
01:41:10 17 it's time to capture the check image to be used for
01:41:14 18 deposit -- I'm not going to lead you through all those
01:41:17 19 other sections -- the camera functionality controlled by
01:41:20 20 the processor then captures the check image. Specifically,
01:41:24 21 the camera functionality creates a new color JPEG file,
01:41:29 22 transcoding the raw frame data obtained from the camera
01:41:32 23 sensor.

01:41:32 24 Q. And what do you discuss in Paragraph -- in the next
01:41:36 25 paragraph, Paragraph 252?

01:41:38 1 A. I then discuss that that JPEG becomes the check image
01:41:45 2 that is transmitted to the bank's server when the check
01:41:48 3 deposit is submitted, as I discussed in more detail
01:41:52 4 elsewhere in the report.

01:41:53 5 Q. Do you see anything in Paragraph 251 that talks about
01:41:57 6 transmitting a JPEG or other check image to a bank server?

01:42:01 7 A. No.

01:42:05 8 Q. Professor Conte, were you in court yesterday afternoon
01:42:09 9 when Mr. Bueche testified and when some deposition videos
01:42:14 10 were played?

01:42:15 11 A. Yes.

01:42:16 12 Q. Let me ask this: You're familiar with Mr. Saffici,
01:42:21 13 Wells Fargo's expert?

01:42:22 14 A. Yes, I read his transcript -- deposition transcript.

01:42:26 15 Q. So you've read the deposition transcript of Mr. Saffici
01:42:31 16 before yesterday?

01:42:31 17 A. Yes.

01:42:35 18 Q. And were you in court when the actual video of that
01:42:39 19 deposition was played?

01:42:39 20 A. Yes, I was in court when it was played.

01:42:42 21 MR. ROWLES: And, Mr. Huynh, if we could get
01:42:46 22 Page 147 of yesterday afternoon's trial transcript.

01:42:53 23 Q. (By Mr. Rowles) Mr. Melsheimer asked you some
01:42:54 24 questions about the plain and ordinary meaning of the word
01:42:58 25 capture. Do you remember that?

01:42:59 1 A. Yes.

01:42:59 2 Q. And is the plain and ordinary meaning of the word

01:43:01 3 capture something that you applied when you did your

01:43:03 4 infringement analysis?

01:43:03 5 A. Yes, I did.

01:43:08 6 MR. ROWLES: And if we could highlight starting at

01:43:11 7 Line 9 down to Line 17, please?

01:43:13 8 Q. (By Mr. Rowles) And could you read that testimony from

01:43:21 9 Mr. Saffici's video testimony, please?

01:43:23 10 A. Question: You believe that it's covered by the claims

01:43:27 11 of the patent, correct, analyzing preview frames, making

01:43:31 12 decisions as to when the preview frames satisfy the

01:43:35 13 criteria, and then taking that frame that satisfies the

01:43:38 14 criteria. Correct?

01:43:39 15 Answer: Yes. The alignment, the monitoring, and

01:43:43 16 the auto capture.

01:43:44 17 Question: The answer to my question is yes,

01:43:48 18 correct?

01:43:48 19 Answer: I believe that's -- that'd be correct.

01:43:52 20 Q. Now, is the first part of that -- first question, is

01:43:56 21 that similar in any way to what the Wells Fargo system

01:44:00 22 does?

01:44:00 23 A. Yes, in my detailed analysis, it's identical to what

01:44:03 24 the Wells Fargo system does.

01:44:04 25 Q. Now, in terms of the meaning of capture in these

01:44:10 1 claims, does Wells Fargo's expert, Mr. Saffici, agree with
01:44:13 2 you or with Mr. Melsheimer?

01:44:17 3 MR. MELSHEIMER: Objection, Your Honor.

01:44:21 4 Misleading -- I mean, objection, misstates the testimony.

01:44:25 5 THE COURT: Overruled.

01:44:28 6 A. He agrees with me. He agrees that it's taking the
01:44:32 7 frame that satisfies the criteria.

01:44:36 8 MR. ROWLES: Mr. Huynh, if you -- do you have the
01:44:38 9 excerpt of code from Lines 2278 to 20 -- I believe 2281
01:44:43 10 that was discussed?

01:44:45 11 Q. (By Mr. Rowles) While he gets that up, Professor
01:44:53 12 Conte, I want to ask you a little about source code. You
01:44:55 13 discussed -- or Mr. Melsheimer asked you some questions
01:44:58 14 about your counterpart, so to speak, Dr. Villasenor. Do
01:45:02 15 you remember that?

01:45:02 16 A. Yes.

01:45:02 17 Q. And -- and you -- I believe you said you reviewed
01:45:06 18 Mr. Villasenor's expert -- excuse me, Dr. Villasenor's
01:45:09 19 expert report in this matter, right?

01:45:11 20 A. Yes, sir, I did. I read it entirely.

01:45:13 21 Q. Do you know whether or not Dr. Villasenor reviewed any
01:45:19 22 source code on the computers in Dallas, Texas?

01:45:23 23 A. He did not.

01:45:25 24 Q. And now -- now we have this line of code up.

01:45:31 25 Do you recall discussing these lines of code

01:45:34 1 starting at Line 2278?

01:45:35 2 A. Yes.

01:45:37 3 Q. And Mr. Melsheimer asked you some questions about

01:45:40 4 comments in code. Do you recall that?

01:45:43 5 A. Yes.

01:45:43 6 Q. And a comment -- is a comment in code executed?

01:45:51 7 A. No, a comment is not.

01:45:52 8 Q. What about the code that we see here at Lines 2278

01:45:58 9 through 2280, is that code executed in the Wells Fargo

01:46:04 10 application?

01:46:04 11 A. The code that contains this is executed in the Wells

01:46:11 12 Fargo application, but this is the title of that code.

01:46:15 13 It's not a comment, but it's like a comment.

01:46:19 14 Q. So are Lines 2278 through 2280, specifically, are those

01:46:25 15 executed in the Wells Fargo application?

01:46:26 16 A. They are -- the code below them is executed, but these

01:46:33 17 are not specifically executed, no.

01:46:35 18 Q. You discussed some iPhone or iOS documentation. Do you

01:46:42 19 recall that?

01:46:43 20 A. Yes, I do.

01:46:43 21 Q. And I think there was some discussion of a delegate or

01:46:46 22 delegation. Do you recall that, generally?

01:46:48 23 A. Yes.

01:46:48 24 Q. In a -- in a standard iPhone camera application like

01:46:54 25 the one that comes preloaded on the phone, how are -- how

01:46:59 1 does the image capture process work?

01:47:01 2 A. It works where the delegate will take the -- the image

01:47:11 3 and encode it into a JPEG file.

01:47:14 4 Q. And how does that work in the Wells Fargo system?

01:47:17 5 A. In the Wells Fargo system, the delegate first takes the

01:47:22 6 preview image, it analyzes it with

01:47:28 7 analyzeFrame:sampleBuffer. If it passes that criteria,

01:47:31 8 then and only then does it encode it into a JPEG file.

01:47:42 9 MR. ROWLES: Mr. Huynh, if we could have Slide 72,

01:47:58 10 please.

01:47:58 11 Q. (By Mr. Rowles) Professor Conte, you were asked a few

01:48:00 12 questions, I believe it was near the end of the

01:48:02 13 cross-examination, about changes in Mitek code over time.

01:48:08 14 Do you recall that?

01:48:08 15 A. Yes.

01:48:09 16 Q. Is any of the functionality that you discussed in your

01:48:13 17 direct examination, shown here on Slide 72, did that change

01:48:17 18 in any relevant part, over time?

01:48:20 19 A. It did not.

01:48:24 20 Q. And I think you made some reference to other code or

01:48:28 21 changes. Do you generally remember that?

01:48:31 22 A. Yes.

01:48:31 23 Q. And did that code have any relevance to your

01:48:35 24 infringement analysis?

01:48:36 25 A. No.

01:48:37 1 Q. And -- and why not?

01:48:39 2 A. Well, because it was talking about other forms of
01:48:45 3 capture implemented by the Mitek software.

01:48:47 4 Q. Now, Mr. Melsheimer asked you about the lines of code
01:48:52 5 starting at 2278, which we just saw an extra -- excerpt of,
01:48:58 6 right?

01:48:58 7 A. Yes, yes.

01:48:59 8 Q. Did Mr. Melsheimer ask you about any of the lines of
01:49:03 9 the code below that, 2323, 2326, and so on down to 2481?

01:49:09 10 A. He did not.

01:49:15 11 MR. ROWLES: Now, if we can get Slide 86, please.

01:49:22 12 Q. (By Mr. Rowles) I believe there was some discussion
01:49:24 13 about whether code trumps other pieces of information.
01:49:30 14 Generally remember that?

01:49:32 15 A. Yes.

01:49:32 16 Q. Now, I want to direct your attention to Step 3 in your
01:49:36 17 process diagram here. Let me ask this: The source code
01:49:44 18 that you described for capturing check images, where is
01:49:49 19 that source code executed in the process of the Wells Fargo
01:49:52 20 system?

01:49:54 21 A. That's after you pass the analyze preview frame using
01:50:02 22 monitoring criteria, Step 2, that's in Step 3.

01:50:05 23 MR. ROWLES: And if we could return to Slide 72,
01:50:09 24 please.

01:50:09 25 Q. (By Mr. Rowles) So having that process diagram in

01:50:15 1 mind, when does the code above the green box here, labeled
01:50:21 2 after monitoring criteria passed, when does that source
01:50:26 3 code execute in the Wells Fargo system?

01:50:27 4 A. That code executes when a new preview frame comes in.

01:50:31 5 Q. And the lines of code that are listed under the green
01:50:34 6 box, under after monitoring criteria passed, when do those
01:50:42 7 lines of code execute in the Wells Fargo system?

01:50:43 8 A. Those lines execute if and only if the monitoring
01:50:47 9 criteria pass.

01:50:50 10 MR. ROWLES: Nothing further. Pass the witness,
01:50:52 11 Your Honor.

01:50:52 12 THE COURT: Is there further cross-examination?

01:50:54 13 MR. MELSHEIMER: Briefly, Your Honor. May it
01:50:56 14 please the Court.

01:50:56 15 THE COURT: You may proceed with your additional
01:50:58 16 cross-examination.

01:50:58 17 RECROSS-EXAMINATION

01:50:59 18 BY MR. MELSHEIMER:

01:50:59 19 Q. Dr. Conte, you know who Mr. Saffici is, right?

01:51:04 20 A. I -- I read the description of his job, yeah.

01:51:07 21 Q. You know that he was not forming any infringement
01:51:10 22 analysis in this case, right?

01:51:12 23 A. My understanding, I actually don't know his role in the
01:51:17 24 case. I'm sorry.

01:51:18 25 Q. Okay. No one told you --

01:51:19 1 MR. ROWLES: Your Honor, I think we need to
01:51:21 2 approach the bench.

01:51:21 3 THE COURT: All right. Approach the bench.

01:51:23 4 (Bench conference.)

01:51:35 5 THE COURT: Yes.

01:51:36 6 MR. ROWLES: First, Your Honor, he was their claim
01:51:38 7 construction expert, so his testimony is relevant to that.
01:51:41 8 But I worry that this is getting into the reason why he's
01:51:45 9 not here, which is that he was also a validity expert.

01:51:48 10 MR. MELSHEIMER: Your Honor, they have injected
01:51:50 11 this guy into the infringement case. It's totally
01:51:55 12 improper. We objected to it. They continue to do it.

01:51:58 13 They're now asking their infringement expert if he
01:52:02 14 agrees or disagrees with Mr. Saffici. In fact, they said
01:52:06 15 does, Mr. Saffici agree with you? So they're actually
01:52:09 16 getting him to read the mind of Mr. Saffici. It's totally
01:52:12 17 improper.

01:52:13 18 We have to be able to establish, in fairness, that
01:52:15 19 this guy did not do an infringement analysis. He did not
01:52:18 20 review the source code. That's what Dr. Villasenor did.
01:52:22 21 And I'm not going to bring up what he did do, and I assume
01:52:25 22 this witness has been instructed not to bring it up.

01:52:28 23 But it would be really unfair if we didn't get to
01:52:30 24 point this out, given the shenanigans that are going on
01:52:34 25 with Mr. Saffici.

01:52:37 1 MR. ROWLES: Your Honor, the only question --

01:52:37 2 THE COURT: I haven't heard the word "shenanigans"

01:52:39 3 before, and you said that the Plaintiff has been unfairly

01:52:43 4 injecting this into the case. I haven't heard you object

01:52:45 5 to anything they've injected into the case so far.

01:52:47 6 MR. MELSHEIMER: Your Honor, we've objected

01:52:49 7 several -- we've objected several times.

01:52:52 8 THE COURT: Are you talking about during the

01:52:54 9 trial, or are you talk about during pre-trial?

01:52:56 10 MR. MELSHEIMER: During -- during pre-trial. I

01:52:58 11 just objected that it was misleading and misstating his

01:53:02 12 testimony. You overruled the objection.

01:53:04 13 We've talked about the issue of comparing the spec

01:53:07 14 to the accused product. This is the mess -- and,

01:53:09 15 Your Honor, I'm just -- this is the potential of creating a

01:53:12 16 mess if we are -- we are not allowed to make these

01:53:16 17 corrections with this witness. It's not fair to not let us

01:53:20 18 do that.

01:53:22 19 Obviously, Dr. Villasenor will have his own

01:53:24 20 opinions, but Mr. Saffici, everyone at this bench knows,

01:53:28 21 that that man did not offer a non-infringement -- a

01:53:31 22 non-infringement opinion. Didn't happen.

01:53:34 23 MR. ROWLES: Your Honor, we have --

01:53:35 24 THE COURT: Let me hear from Mr. Rowles.

01:53:37 25 MR. ROWLES: We have no problem with him

01:53:39 1 establishing that Mr. Saffici was not an infringement
01:53:41 2 expert. However, he was a claim construction expert.

01:53:43 3 The question that was posed to Professor Conte had
01:53:46 4 to do with the plain and ordinary meaning of the word
01:53:48 5 "capture" to a person of ordinary skill in the art, which
01:53:51 6 is something that Mr. Saffici opined on.

01:53:53 7 So I think that we should be permitted to tell the
01:53:56 8 jury that he was a claim construction expert for Wells
01:53:58 9 Fargo if this is where we're going to go.

01:54:00 10 MR. MELSHEIMER: Your Honor, the claim
01:54:01 11 construction is not the jury's job. They're simply told
01:54:04 12 that you do that, and they don't get into that. All that
01:54:07 13 would be -- to me would be unheard of to tell them
01:54:10 14 something like that.

01:54:11 15 All I want to establish is that this --
01:54:14 16 Your Honor, they're trying to show some expert we hired
01:54:18 17 said we infringe, and that's why we can't -- that's exactly
01:54:21 18 the point they're trying to make. That's unfair. You
01:54:24 19 shouldn't let them do that. We should get an instruction
01:54:26 20 that says that's improper.

01:54:28 21 THE COURT: Wait a minute. Wait a minute. You're
01:54:30 22 at the podium now. They -- you know, you're back for
01:54:33 23 additional cross-examination. And you're telling me that
01:54:38 24 during the redirect, they created this odor, as you put it,
01:54:44 25 that you had one objection that I overruled and that's the

01:54:47 1 source of all this odor that you're trying to correct?

01:54:50 2 MR. MELSHEIMER: Your Honor, I'm entitled, I
01:54:51 3 believe, to make my own judgments about what's appropriate
01:54:54 4 to object versus what's appropriate to cross-examine a
01:54:56 5 witness on.

01:54:57 6 THE COURT: You are, but you're not entitled to
01:54:59 7 sit there, not object, and then tell me when they get back
01:55:02 8 up to the podium they've created this horrible mess that I
01:55:05 9 now have to fix.

01:55:06 10 MR. MELSHEIMER: Your Honor -- well, to be clear,
01:55:10 11 all I'm asking is that you let me inquire. I'm not asking
01:55:15 12 for you to fix anything, actually. I'm asking right now in
01:55:18 13 line with this objection that I be allowed to ask these
01:55:21 14 questions and clear this up, or else it will be an odor.

01:55:26 15 THE COURT: Tell me precisely, Mr. Melsheimer,
01:55:29 16 what you're proposing to ask of this witness on cross.

01:55:31 17 MR. MELSHEIMER: That he -- that he didn't do an
01:55:33 18 infringement analysis; that he wasn't an infringement
01:55:35 19 expert; that he didn't review all the source code; and that
01:55:38 20 he's never seen an infringement opinion from this witness
01:55:41 21 one way or the other.

01:55:42 22 THE COURT: And you're talking about -- you're not
01:55:44 23 asking Professor Conte this about Professor Conte. You're
01:55:48 24 asking Professor Conte this about who?

01:55:51 25 MR. MELSHEIMER: Mr. Saffici, because Mr. Saffici

01:55:53 1 was brought up in the redirect. That's the only reason
01:55:57 2 this is coming up. And they asked him, Your Honor: Does
01:56:02 3 Mr. Saffici agree with you and Wells Fargo? That was my
01:56:05 4 objection. But in any event, I think I can --

01:56:09 5 THE COURT: You can ask the witness if his
01:56:12 6 understanding is that Mr. Saffici was not an infringement
01:56:16 7 expert and did not offer an infringement opinion.

01:56:18 8 MR. MELSHEIMER: And did not review source code.

01:56:20 9 THE COURT: No, those two questions. I'll permit
01:56:23 10 that. Because, quite honestly, I'm going to keep this
01:56:27 11 under -- I'm concerned that this will get out of hand if I
01:56:31 12 let you all do what you each think you need to do.

01:56:35 13 So I'm going to prescribe what you can do. And in
01:56:37 14 light of what's happened so far, I'm going to permit the
01:56:40 15 Defendant to ask this witness to identify that Mr. Saffici
01:56:44 16 is not an infringement expert in this case and did not
01:56:48 17 offer a formal non-infringement opinion. And then you're
01:56:51 18 going to -- then we're going to move on to something else.

01:56:54 19 MR. MELSHEIMER: Understood, Your Honor.

01:56:54 20 THE COURT: All right. That's my ruling.

01:56:56 21 (Bench conference concluded.)

01:57:05 22 THE COURT: Let's proceed.

01:57:06 23 MR. MELSHEIMER: May it please the Court.

01:57:06 24 Q. (By Mr. Melsheimer) Dr. Conte, you know that
01:57:11 25 Mr. Saffici was not a non-infringement expert in this case

01:57:14 1 for Wells Fargo, correct?

01:57:18 2 A. I -- I believe that's true.

01:57:20 3 Q. And you know also, because he wasn't a non-infringement

01:57:24 4 expert for Wells Fargo, that he did not offer a

01:57:29 5 non-infringement opinion for Wells Fargo, true?

01:57:31 6 A. I believe that's correct.

01:57:36 7 Q. You were asked a question about Dr. Villasenor, whether

01:57:44 8 or not he reviewed the code in Dallas. Do you remember

01:57:49 9 that question?

01:57:50 10 A. Yes.

01:57:50 11 Q. You weren't trying to suggest that he didn't review the

01:57:53 12 code, were you?

01:57:54 13 A. I don't recall any indication in his report that he

01:57:56 14 did.

01:57:57 15 Q. So is it your view --

01:57:59 16 THE COURT: Counsel, approach the bench.

01:58:01 17 (Bench conference.)

01:58:10 18 THE COURT: Mr. Melsheimer, you specifically asked

01:58:12 19 me for permission to go into whether Mr. Saffici reviewed

01:58:15 20 the code when you were at the bench 30 seconds ago, and I

01:58:18 21 told you no. And you just asked this witness that.

01:58:21 22 MR. MELSHEIMER: Your Honor, I did not.

01:58:23 23 Respectfully, I asked Dr. Villasenor --

01:58:25 24 THE COURT: You said --

01:58:26 25 MR. MELSHEIMER: They made the point -- this was

01:58:28 1 in direct response to a cross -- redirect question. If I
01:58:31 2 said Saffici --

01:58:34 3 THE COURT: You said "he" following all the
01:58:36 4 questions about Saffici.

01:58:37 5 MR. MELSHEIMER: Well, Your Honor, I'll make it
01:58:38 6 very clear. I was in no way -- I was trying to address
01:58:41 7 this point.

01:58:41 8 THE COURT: Clarify it was not Saffici.

01:58:45 9 MR. MELSHEIMER: I will do that. I will do that.

01:58:48 10 (Bench conference concluded.)

01:58:51 11 THE COURT: Let's proceed. Restate your question,
01:58:53 12 counsel.

01:58:53 13 MR. MELSHEIMER: May it please the Court.

01:58:54 14 Q. (By Mr. Melsheimer) Dr. Conte, my question's about
01:58:57 15 Dr. Villasenor. Are you with me?

01:58:58 16 A. Yes.

01:59:01 17 Q. And your -- is it your testimony that Dr. Villasenor
01:59:05 18 did not review the source code in this case?

01:59:07 19 A. I don't recall a section in his report where he said he
01:59:11 20 did.

01:59:12 21 Q. You were shown some information from the specification
01:59:22 22 of the patent on your redirect examination?

01:59:25 23 A. Yes.

01:59:25 24 Q. You understand, don't you, that infringement -- that
01:59:30 25 someone cannot infringe the specification of a patent; it

01:59:34 1 has to be infringement of a claim of a patent? You
01:59:37 2 understand that, right?

01:59:39 3 A. Yes.

01:59:48 4 Q. And with respect to exhibit -- the Paragraph 83 of your
01:59:59 5 report, sir, I just want to end with that. You were asked
02:00:11 6 about this in your -- in your redirect examination.

02:00:19 7 MR. MELSHEIMER: Your Honor, may I approach the
02:00:21 8 counsel table to get a highlighter?

02:00:23 9 THE COURT: Yes, you may.

02:00:25 10 Q. (By Mr. Melsheimer) And I believe your testimony was
02:00:33 11 that it was not sequential?

02:00:36 12 A. No. My testimony was that these were not ordered
02:00:44 13 steps. I'm an engineer. Sorry.

02:00:47 14 Q. So you view sequence as being something different from
02:00:52 15 the ordered steps. I want to use your words.

02:00:54 16 Ordered -- you don't view these as ordered steps
02:00:57 17 is what you're telling the jury, right, but you don't
02:01:01 18 disagree --

02:01:03 19 THE COURT: Well, let's let him answer your first
02:01:06 20 question before you ask the next question.

02:01:09 21 MR. MELSHEIMER: I'm sorry, Your Honor.

02:01:10 22 THE COURT: You asked him if he -- let's see.

02:01:12 23 Q. (By Mr. Melsheimer) You don't view these as ordered
02:01:14 24 steps, correct?

02:01:15 25 A. That's correct.

02:01:15 1 THE COURT: Okay.

02:01:16 2 Q. (By Mr. Melsheimer) But the first thing in your list

02:01:20 3 is image capture, right?

02:01:22 4 A. Specifically, it's image capture, front and rear, auto

02:01:29 5 and manual capture modes.

02:01:30 6 Q. And this thing on the bottom, corners tracking, do you

02:01:36 7 see that?

02:01:37 8 A. Yes.

02:01:39 9 Q. Are you saying that should go in IQA threshold checking

02:01:43 10 or somewhere else?

02:01:53 11 A. When I wrote this, I put it as a separate feature.

02:01:57 12 Q. But are you saying now, upon reflection, in front of

02:02:00 13 the ladies and gentlemen of the jury, that you believe that

02:02:02 14 corners tracking actually should be part of IQA threshold

02:02:06 15 checking?

02:02:06 16 A. I wouldn't quite put it that way.

02:02:11 17 Q. Where would you put it, sir? Would you put it -- would

02:02:14 18 you put it No. 2, 2A, or 3?

02:02:17 19 A. These are not sequential, sir.

02:02:24 20 Q. Well, you would put it before IQA threshold checking,

02:02:28 21 right aligned with IQA threshold checking, or after IQ --

02:02:34 22 IQA threshold checking in this chart?

02:02:37 23 A. These are not sequential, sir. I wouldn't change the

02:02:41 24 order that I wrote these in because they're not sequential.

02:02:43 25 Q. Where does corners tracking occur, sir, in the Mitek

02:02:49 1 auto snap -- auto capture -- that's a word salad.

02:02:54 2 Where does image -- where does corners tracking

02:03:00 3 occur in the Mitek MiSnap software, sir?

02:03:04 4 A. In the iPhone version, it occurs in analyze frame.

02:03:14 5 Q. Is that the same thing as IQA threshold check?

02:03:18 6 A. IQA threshold checking was a Mitek, I believe, term for

02:03:24 7 aspects of monitoring criteria.

02:03:26 8 Q. And is that the same thing as what you just described?

02:03:29 9 A. No, it's not the same thing.

02:03:30 10 Q. But those are the words that you used, IQA threshold

02:03:35 11 checking?

02:03:35 12 A. Yes.

02:03:36 13 Q. The source code you looked at had a title called

02:03:55 14 DevApp. Do you recall that?

02:03:57 15 A. I need to see it. I'm sorry.

02:04:03 16 Q. The version of the software you looked at was what's

02:04:07 17 called a DevApp version. Do you know that or not?

02:04:11 18 A. I don't recall it being called DevApp.

02:04:15 19 Q. Do you have any understanding of what DevApp means?

02:04:18 20 A. I would have to speculate.

02:04:21 21 Q. I don't want you to do that. Thank you, sir.

02:04:26 22 MR. MELSHEIMER: Your Honor, pass the witness.

02:04:27 23 THE COURT: All right. Does the Plaintiff have

02:04:28 24 further redirect?

02:04:30 25 MR. ROWLES: No, Your Honor.

02:04:31 1 THE COURT: Then, Professor Conte, you may step
02:04:32 2 down.

02:04:33 3 THE WITNESS: Thank you, sir.

02:04:39 4 THE COURT: Plaintiff, call your next witness.

02:04:41 5 MS. GLASSER: USAA calls Mr. Matthew Calman.

02:04:47 6 Your Honor, permission for Mr. Sheasby to assist
02:04:52 7 in the handing out of binders?

02:04:53 8 THE COURT: That will be fine.

02:04:55 9 If you'll come forward and be sworn, sir.

02:05:06 10 (Witness sworn.)

02:05:11 11 THE COURT: If you'll come around, sir, and have a
02:05:13 12 seat on the witness stand.

02:05:14 13 Mr. Calman, I understand you have a medical
02:05:16 14 condition that may require you to put an eyedrop in your
02:05:18 15 eyes from time to time?

02:05:19 16 THE WITNESS: Yes, sir, that's correct.

02:05:20 17 THE COURT: You have permission to do that if you
02:05:22 18 need to.

02:05:23 19 THE WITNESS: Thank you.

02:05:25 20 MR. SHEASBY: Your Honor, may I clear the binders?

02:05:27 21 THE COURT: Yes, you may.

02:05:54 22 All right. Ms. Glasser, you may proceed.

02:05:57 23 MS. GLASSER: Thank you, Your Honor.

02:05:57 24 MATTHEW CALMAN, PLAINTIFF'S WITNESS, SWORN

02:05:57 25 DIRECT EXAMINATION

02:05:57 1 BY MS. GLASSER:

02:05:57 2 Q. Good afternoon, Dr. -- Mr. Calman.

02:06:00 3 A. Good afternoon.

02:06:01 4 Q. Could you please start by describing for us at a high

02:06:05 5 level your professional background?

02:06:07 6 A. Sure. I'm happy to.

02:06:09 7 So I began --

02:06:13 8 Q. Let me pause you. It looks like we're having a little

02:06:16 9 bit of an EV issue.

02:06:18 10 MS. GLASSER: Mr. Huynh?

02:06:25 11 I'm so sorry, Your Honor. Permission to approach

02:06:29 12 Mr. Huynh?

02:06:30 13 THE COURT: Take a -- take a moment. Let's get it

02:06:32 14 straight at the beginning.

02:07:09 15 MS. GLASSER: Apologies to Your Honor and the

02:07:11 16 ladies and gentlemen of the jury. We'll just go ahead and

02:07:13 17 manually advance them so we don't keep folks waiting.

02:07:16 18 THE COURT: That will be fine.

02:07:19 19 MS. GLASSER: May we please have the next slide?

02:07:22 20 Q. (By Ms. Glasser) Mr. Calman, could you please describe

02:07:24 21 for us an overview of your professional background?

02:07:26 22 A. Sure. Happy to. So my name is Matthew Calman. I

02:07:30 23 attended a couple of years of college at Carnegie-Mellon

02:07:32 24 University. I was a math major for those years. I didn't

02:07:36 25 graduate. I went straight to work. I was ready to go.

02:07:39 1 And I went to work in the financial services
02:07:41 2 industry. Years later, I went back and got my MBA, my
02:07:46 3 Master's in business administration at Georgia State
02:07:50 4 University.

02:07:50 5 Q. And let me pause you there. Sir, did you receive any
02:07:53 6 academic honors while you were receiving your graduate
02:07:56 7 degree?

02:07:57 8 A. I did. I won the George J. Malanos Award for academic
02:08:05 9 excellence for being No. 1 in my class.

02:08:08 10 Q. Would you please describe an overview of your industry
02:08:11 11 experience at Bank of America?

02:08:12 12 A. So the bulk of my career was at Bank of America. I was
02:08:15 13 there for 27 years in a variety of operations and
02:08:20 14 technology leadership roles. I've highlighted two relevant
02:08:25 15 positions while I was at the bank.

02:08:27 16 The first, I was process design executive for what
02:08:33 17 was the image transformation -- transforming the bank's
02:08:37 18 paper traditional check processing to image processing.
02:08:42 19 And in doing that, I led a team with about 400
02:08:48 20 technologists and business analysts through all the aspects
02:08:52 21 of modifying our systems and our processes and procedures
02:08:54 22 to handle image instead of paper.

02:08:56 23 Q. Sir, at that point in time, can you give us a sense,
02:09:01 24 how was check imaging done in the banking system?

02:09:06 25 A. Well, thinking back, you have to imagine sort of check

02:09:11 1 factories. We had almost two dozen processing centers at
02:09:15 2 Bank of America with hundreds and some with thousands of
02:09:19 3 workers operating specialized equipment, these large check
02:09:22 4 scanners, large trays full of checks, many, many, many
02:09:24 5 checks.

02:09:25 6 And these processing systems and machines would
02:09:27 7 run -- some machines ran as fast as a hundred thousand
02:09:31 8 documents per hour. So, really, industrial scale equipment
02:09:34 9 in order to process the millions of checks we had to get
02:09:37 10 through every day.

02:09:38 11 Q. Opposing counsel mentioned earlier today something
02:09:43 12 called Check 21, and we went through that pretty quickly.
02:09:48 13 Can you give us an overview of what is check 21 and what
02:09:52 14 was your involvement with that?

02:09:53 15 A. So this was the law that was passed in 2003, and then
02:09:58 16 we had one year before it became effective in 2004 to do
02:10:01 17 this big image transformation that I was speaking of.

02:10:04 18 And what Check 21 did, essentially, was to allow
02:10:08 19 an image of a check to be the legal equivalent of the
02:10:12 20 original check. So that -- kind of like email versus
02:10:15 21 postal mail.

02:10:17 22 And so instead of having to move these many
02:10:20 23 millions of checks per day all over the country, in some
02:10:23 24 cases by jet aircraft, private jets flying checks around,
02:10:27 25 we could now use the power of image to make those kinds of

02:10:33 1 transfers happen much, much quicker, much cheaper, and more
02:10:37 2 reliably.

02:10:38 3 Q. What was your personal involvement in Check 21?

02:10:41 4 A. So for me, it was all about implementation, and taking
02:10:47 5 these new rules and making them real, bringing that to life
02:10:52 6 with bank operations that ran on image instead of on paper.

02:10:56 7 Q. Now, tell us about your roles starting in 2006 when you
02:11:04 8 shifted into the position of research and development
02:11:07 9 executive?

02:11:07 10 A. So after a couple of years of work on this
02:11:10 11 implementation of check image, I became an R&D, or research
02:11:16 12 and development, executive at the bank. And I ran gateway
02:11:20 13 innovation lab, which was a lab environment where we worked
02:11:22 14 to bring other new technologies that were just emerging,
02:11:25 15 just coming into existence and coming into use, and how
02:11:30 16 those might find their way into future products and apps
02:11:33 17 for the bank.

02:11:34 18 And so I've listed a couple here. Biometrics, you
02:11:38 19 know, so you can use your thumb to unlock your phone.

02:11:41 20 Augmented reality. And, in fact, my team built Bank of
02:11:45 21 America's first prototype for mobile deposit.

02:11:53 22 Q. What time frame were you working on the mobile deposit
02:11:57 23 prototype?

02:11:57 24 A. So that prototype in particular was at the end of 2008,
02:12:02 25 first few months of 2009.

02:12:04 1 Q. And back at that time frame, was the prototype
02:12:09 2 successful from a commercial viability standpoint?
02:12:12 3 A. At this point, the prototype was just primitive. At
02:12:17 4 that time, really the common belief within the check
02:12:20 5 processing industry was that cell phones couldn't do that
02:12:23 6 sort of thing. So this prototype proved in Bank of
02:12:27 7 America's test environment that you actually could capture
02:12:31 8 check images with a phone and get them all the way through
02:12:34 9 to successfully deposit.

02:12:37 10 Q. And you said it wasn't commercially valuable -- viable.
02:12:41 11 Can you elaborate on why that was the case?

02:12:44 12 A. Well, this was, again -- it was just a test system. It
02:12:48 13 wasn't even a real app, per se. It was just enough, just
02:12:52 14 enough to demonstrate that some images, not all of them,
02:12:56 15 but some images could be captured with a phone of the day,
02:13:00 16 and processed all the way through to deposit.

02:13:02 17 Q. And did you ever work with the vendor, who's been
02:13:06 18 mentioned a few times here in the courtroom, called Mitek?

02:13:10 19 A. We did. Their software was involved in that primitive
02:13:14 20 prototype I mentioned.

02:13:15 21 Q. Was that software manual capture at that time or auto
02:13:19 22 capture?

02:13:19 23 A. Oh, it was manual capture. We -- that was it.

02:13:25 24 Q. When you left Bank of America in 2013, did Bank of
02:13:31 25 America yet have a commercially available auto capture

02:13:35 1 product?

02:13:35 2 A. No, not yet.

02:13:37 3 Q. Approximately how far behind USAA was the rest of the

02:13:44 4 industry at that time?

02:13:45 5 A. Well, for -- certainly for Bank of America, we were

02:13:49 6 three years behind. Bank of America didn't release its

02:13:52 7 manual capture solution until 2012. And it wasn't -- as I

02:13:56 8 said, as you said, until after I left, that they even

02:14:00 9 released auto capture.

02:14:01 10 Q. Did USAA have a reputation in the industry?

02:14:06 11 A. Well, yes, they were the pioneer. They invented this

02:14:10 12 whole -- this whole technology and capability to use a

02:14:14 13 smartphone to capture an image of a check of sufficient

02:14:17 14 quality to make it all the way through to deposit.

02:14:21 15 Q. Now, sir, are you personally the inventor on any

02:14:25 16 patents?

02:14:25 17 A. I am.

02:14:28 18 Q. Approximately how many, if you know?

02:14:30 19 A. I'm a named inventor on 96 issued U.S. patents.

02:14:36 20 Q. Sir, you left Bank of America in 2013; is that right?

02:14:42 21 A. That's right.

02:14:42 22 Q. Are you employed today?

02:14:43 23 A. Yes. I have my own consultancy. At that point, our

02:14:47 24 kids were grown and out of the house, and it seemed like a

02:14:50 25 good time to start my own thing.

02:14:51 1 Q. What do you do as part of your consultancy?

02:14:57 2 A. So I consult to U.S. and Canadian banks and banking

02:15:03 3 software companies on things like innovation.

02:15:06 4 Q. Did USAA retain you to perform consulting work and

02:15:10 5 analysis in connection with this case?

02:15:11 6 A. They did.

02:15:12 7 Q. Are you being paid for your work on this case, sir?

02:15:14 8 A. I am. My customary rate for this work is 550 per hour.

02:15:19 9 Q. Is that compensation in any way at all dependent on the

02:15:22 10 substance of your opinions or the outcome of this case?

02:15:26 11 A. No, not at all.

02:15:28 12 MS. GLASSER: Your Honor, USAA tenders Mr. Calman

02:15:31 13 as an expert on banking technology and operations.

02:15:34 14 THE COURT: Is there objection?

02:15:35 15 MR. MELSHEIMER: May it please the Court. No

02:15:37 16 objection, Your Honor.

02:15:37 17 THE COURT: All right. Then the Court recognizes

02:15:40 18 this witness as an expert in those designated fields.

02:15:42 19 Continue, please.

02:15:45 20 MS. GLASSER: Could we have the next slide,

02:15:48 21 please?

02:15:48 22 Your Honor, may I approach to receive the clicker?

02:15:51 23 THE COURT: You may.

02:15:52 24 MS. GLASSER: Thank you very much.

02:16:11 25 Q. (By Ms. Glasser) Did you form any opinions relating to

02:16:14 1 the value of the USAA patents that are at issue in this
02:16:16 2 lawsuit?

02:16:16 3 A. I did. As we have on the slide, I had a couple of
02:16:23 4 assignments. I was -- and opinions that resulted from that
02:16:26 5 work.

02:16:27 6 First, I've rendered my opinion on the
02:16:31 7 significance of auto capture and that it is a must-have
02:16:35 8 technology necessary for really any commercially viable
02:16:39 9 MRDC, or mobile remote deposit capture system.

02:16:45 10 And, as well, I was asked to do an apportionment
02:16:48 11 analysis, and what that means is I was asked to isolate the
02:16:53 12 value of the MRDC channel or system attributable solely to
02:16:59 13 the patented USAA auto capture portion.

02:17:04 14 And my conclusion -- and we'll talk through this,
02:17:06 15 of course -- but my conclusion was that at least 40 percent
02:17:10 16 of the total value of this new MRDC channel is attributable
02:17:15 17 to auto capture.

02:17:16 18 Q. Before we get into the details of your opinions, what
02:17:20 19 sorts of information did you review in order to assess
02:17:24 20 those issues?

02:17:25 21 A. So on the next slide, we've got a list. I worked
02:17:30 22 through many different types of information. Of course,
02:17:33 23 the USAA's asserted patents, number one, as well as system
02:17:39 24 documentation, business documents, both, you know, email
02:17:43 25 and presentations and those kinds of things, mobile deposit

02:17:48 1 data, the actual operational data that these systems report
02:17:52 2 themselves, testimony from other witnesses, industry
02:17:57 3 reports, marketing materials, as well as source code
02:18:02 4 alongside Dr. Conte.

02:18:04 5 Q. Did you review testimony by any of the Wells Fargo
02:18:09 6 experts?

02:18:09 7 A. I did.

02:18:10 8 Q. And did you find that, at a high level, there were any
02:18:13 9 areas of agreement that you had with any of Wells Fargo's
02:18:17 10 experts?

02:18:18 11 A. Yes, indeed. And on this slide, we see Mr. Bill
02:18:23 12 Saffici, who I knew in the industry. And we agree that the
02:18:27 13 patents-in-suit introduce autonomous monitor and corrective
02:18:34 14 feedback. That's what these patents are all about.

02:18:36 15 Mr. Saffici and I agree that those are referred to
02:18:39 16 in the industry in jargon as auto capture. That's what it
02:18:44 17 is.

02:18:44 18 And that the patents claim a technique to obtain
02:18:49 19 an image of sufficient quality that the deposit will be
02:18:51 20 successful in all those downstream systems. And, again,
02:18:54 21 Mr. Saffici and I agree.

02:18:55 22 Q. Focusing on that concept of having an image of
02:19:00 23 sufficient quality, could you explain for us, is there a
02:19:03 24 difference between what a human eye views as sufficient
02:19:08 25 quality for a check and what a machine processing it

02:19:12 1 ultimately will view as sufficient?

02:19:14 2 A. Yes, indeed. And you've heard this discussed before,
02:19:18 3 but I'll reaffirm that there is indeed a difference between
02:19:22 4 what a human can do in terms of looking at a document and
02:19:24 5 reading the information on a document versus what a
02:19:28 6 computer can do.

02:19:30 7 And it's not so easy for a human to know for sure
02:19:33 8 what's going to be readable by a computer, and there's
02:19:36 9 variations between people as to, you know, you may think
02:19:40 10 it's readable, I may not. But a computer knows what a
02:19:44 11 computer can read.

02:19:45 12 Q. What about between individual people, is there any
02:19:50 13 substantial variation between how easy or how hard it is
02:19:54 14 for individual people to capture useable check images?

02:19:58 15 A. Oh, well, yes. On the one hand, for some people, it's
02:20:03 16 really easy. It's even fun to -- to do a check capture.

02:20:08 17 For other people, it's difficult -- even very
02:20:11 18 difficult to get the system to work for them. There's
02:20:13 19 just -- people are different, and they use -- whenever
02:20:17 20 there's humans and technology coming together, it works
02:20:21 21 differently for each person.

02:20:22 22 Q. And how does auto capture assist with that
02:20:26 23 differentiation between people?

02:20:27 24 A. Well, the whole concept here is to improve or increase
02:20:32 25 the number of conforming images. And so if we take the

02:20:36 1 human out of the equation, and we let the computer to
02:20:39 2 decide what a computer can read, it opens up access to the
02:20:43 3 mass market.

02:20:44 4 It means that instead of just those techies, you
02:20:47 5 know, who are really good at apps being the ones who can
02:20:50 6 use mobile remote deposit capture successfully, it means
02:20:53 7 everyone. The mass market has a good chance of being
02:20:56 8 successful.

02:20:59 9 Q. Now, turning to the next slide, I think this may have
02:21:02 10 been mentioned briefly during the openings, but can you
02:21:05 11 identify for the jury exactly what is this document along
02:21:09 12 with this exhibit number?

02:21:10 13 A. So the yellow sticker, it's Plaintiff's Exhibit --
02:21:14 14 excuse me -- Plaintiff's Exhibit No. 5. This is a two --
02:21:20 15 2017 industry benchmarking report comparing the top 15
02:21:25 16 banks and their mobile remote deposit capture solutions.
02:21:29 17 And this is by a specialty consulting firm named Futurion.
02:21:32 18 So you may have heard this Futurion report mentioned.

02:21:35 19 Q. When you say the top 15 banks being the focus of this
02:21:38 20 particular study, how did this entity identify the 15?

02:21:43 21 A. Sure. Typically, this is the -- you know, big banks,
02:21:46 22 the size of their assets, the largest banks, as measured by
02:21:51 23 dollars and cents.

02:21:52 24 Q. So not necessarily in terms of quality, but just total
02:21:55 25 number of deposits?

02:21:56 1 A. Or asset size. Total deposits in the bank.

02:22:00 2 Q. Now, how does this 2017 industry report relate to what

02:22:06 3 you were describing about the difference between a human

02:22:10 4 and a machine's ability to determine sufficiency?

02:22:17 5 A. This is just what I was talking about. The major

02:22:20 6 impediment to mobile deposit is the inability to get a

02:22:24 7 clear picture. We have to be able to see the information

02:22:27 8 on the face of the check in order for that image to be a

02:22:30 9 legal replacement for that original paper document.

02:22:32 10 And so if the major impediment is getting a good

02:22:36 11 picture, what auto capture did was alleviate that obstacle

02:22:41 12 and make it possible for many, many more people to be

02:22:44 13 successful with mobile remote deposit capture.

02:22:45 14 Q. Did you have the opportunity to review any Wells Fargo

02:22:50 15 expert testimony on this specific issue?

02:22:53 16 A. I did. And, again, Mr. Saffici and I are in total

02:22:56 17 agreement that auto capture is widely acknowledged in the

02:23:03 18 industry as the foundation for a successful mobile

02:23:07 19 remote -- mobile check deposit system.

02:23:09 20 Q. You mentioned earlier that some of the initial mobile

02:23:15 21 deposit systems were manual capture; is that right?

02:23:17 22 A. Yes.

02:23:17 23 Q. So why is it the case that today, auto capture is the

02:23:22 24 foundation for successful mobile deposit?

02:23:24 25 A. Well, when mobile remote deposit capture first came out

02:23:30 1 as a manual solution, it was successful. It was even more
02:23:33 2 successful than expected. But that performance wasn't
02:23:39 3 sustainable with the current technology of that day, with
02:23:42 4 manual only. And that was for two reasons.

02:23:44 5 First, the error rates with that manual capture
02:23:54 6 solution were much worse than with traditional paper
02:23:55 7 processing or traditional image processing when you would
02:23:56 8 go to an ATM or go to a teller.

02:23:58 9 And, second, it was those early adopters. It was
02:24:03 10 the tech savvy people who first started using it. And in
02:24:06 11 order to expand beyond that small group, something had to
02:24:09 12 be done.

02:24:10 13 And so that something was auto capture.

02:24:15 14 Q. Did USAA and its customers, its members, experience
02:24:23 15 these benefits that you've been describing, after the
02:24:26 16 technology was introduced in 2013?

02:24:28 17 A. Yes, indeed. Auto capture had a noticeable improvement
02:24:32 18 at USAA.

02:24:33 19 Q. Have you seen any actual numerical data on whether the
02:24:37 20 patented auto capture technology increased acceptance rates
02:24:41 21 or otherwise stated, decreased failure rates at USAA?

02:24:46 22 A. I did.

02:24:47 23 Q. What are we looking at here?

02:24:48 24 A. So on this slide, we're demonstrating that auto capture
02:24:53 25 significantly reduced the failure rate.

02:24:57 1 So on the left, April 2013, we have the full
02:25:01 2 month's performance on the iOS, the Apple app. In the full
02:25:08 3 month before auto capture came along, USAA's members had a
02:25:11 4 15.97 percent failure rate, roughly 16 percent.

02:25:17 5 On the right, in the full month of June, after
02:25:21 6 auto capture was launched, those same users in iOS
02:25:26 7 experienced 9.31 percent. And what changed in the middle?
02:25:31 8 Well, what changed was auto capture. Auto capture came in.

02:25:34 9 And that's a -- but the difference between this
02:25:38 10 nearly 16 percent and this little more than 9 percent, the
02:25:42 11 difference there is 6.6 percentage points.

02:25:47 12 But keep in mind that's just the percentage
02:25:49 13 points. The actual rate of failure decrease was 41.69
02:25:54 14 percent. That's a big difference.

02:25:56 15 Q. Sir, can you elaborate on that 41 percent term, how you
02:26:00 16 derived it, and how it relates to the impact on the actual
02:26:04 17 people, the customers?

02:26:05 18 A. Sure. And you're going to hear a lot of talk about
02:26:08 19 percentages today and -- and error rates and so forth. But
02:26:11 20 to put it in human terms, think of a hundred users. Before
02:26:17 21 auto capture, almost 16 people out of a hundred using the
02:26:20 22 app had errors.

02:26:23 23 After auto capture, it was much closer to about 9
02:26:27 24 people out of a hundred that were having errors. That's
02:26:30 25 the difference in human terms, and that's a reduction of

02:26:34 1 about 42 percent between those 16 or so people and those
02:26:39 2 nine or so people out of each 100 that were having errors.

02:26:45 3 Q. Now, why is it particularly relevant to focus on iOS,
02:26:50 4 the Apple operating system for this data point?

02:26:52 5 A. Sure. So at that point in time, three-quarters of the
02:26:58 6 USAA app users for MRDC were using iPhone. Only
02:27:02 7 one-quarter were using Android. And USAA released Android
02:27:07 8 a couple of months later.

02:27:09 9 Q. Were there any other differences in terms of how
02:27:13 10 accessible calculations were on iOS versus on Android?

02:27:17 11 A. Well, so this was in 2013. And keep in mind that there
02:27:22 12 were a lot of Android phones then that just didn't run apps
02:27:25 13 as consistently the way that iPhones all sort of ran apps
02:27:31 14 consistently. So there was some difference in the iOS
02:27:35 15 data, as compared to the Android data, based upon sort of
02:27:41 16 differences in the phones people were using at that time.

02:27:44 17 Q. Were you able to obtain access in this litigation to
02:27:48 18 Wells Fargo's documents discussing Wells Fargo's failure
02:27:55 19 rates?

02:27:56 20 A. Yes, I was.

02:27:56 21 Q. Did Wells Fargo provide any information regarding what
02:28:00 22 its expectations were for how much auto capture would
02:28:05 23 decrease its failure rates?

02:28:06 24 A. They did, yes. So we know from several documents and
02:28:14 25 places in USAA -- excuse me, in Wells Fargo's history and

02:28:17 1 documents, that they expected this similar kind of
02:28:20 2 significant failure reduction.

02:28:23 3 So Mr. Ajami, who is a senior vice president at
02:28:27 4 Wells Fargo, anticipated a 75 to 90 percent increase in
02:28:31 5 success. So to go from a 75 percent rate to 90 percent
02:28:36 6 after auto capture, and he promoted this in several
02:28:40 7 documents that we saw.

02:28:41 8 For example, we've got PX-489 here. And you'll
02:28:45 9 see that's called a mobile roadmap. Oftentimes inside
02:28:50 10 banks, a roadmap document is used to explain features that
02:28:53 11 are coming down the road. Next couple of years, here's the
02:28:56 12 stuff we're going to add. It's not ready yet, but it's
02:28:59 13 coming.

02:29:02 14 And in this page from July 20th of 2013, was
02:29:08 15 mobile deposit Phase 2, where it talked about auto capture
02:29:12 16 and what was auto capture? Auto capture checks images --
02:29:17 17 check images when the good image is available instead of
02:29:20 18 the customer having to guess.

02:29:21 19 And the improved -- the expect -- their
02:29:24 20 expectation was to improve image take rates from 75 percent
02:29:27 21 to over 90 percent. The same kind of before and after we
02:29:31 22 just looked at.

02:29:31 23 Q. Based on the testimony of Wells Fargo witnesses and the
02:29:36 24 Wells Fargo documents you were given access to, did you
02:29:38 25 have an understanding or did you develop an understanding

02:29:41 1 of what Wells Fargo's goals were with respect to
02:29:46 2 introducing auto capture?

02:29:46 3 A. Yes, I did.

02:29:50 4 So, again, we have Mr. Ajami expressing that --
02:29:54 5 that Wells Fargo knew they needed low failure rates. Their
02:29:59 6 objective was to provide the most -- provide the simplest
02:30:03 7 experience possible and to provide the lowest rate of
02:30:06 8 exceptions and rejected checks. That was the objective.

02:30:10 9 Q. Now, did Wells Fargo also produce in the litigation its
02:30:14 10 data on actual acceptance and failure rates for manual
02:30:19 11 versus auto capture?

02:30:20 12 A. Yes. This was some of the operational data that I
02:30:22 13 mentioned earlier in that list of things I looked at.

02:30:26 14 Q. And what was the source for the operational data that
02:30:30 15 you reviewed?

02:30:31 16 A. So Ms. Lockwood-Stein was formerly designated by Wells
02:30:38 17 Fargo to be their corporate representative and testify on
02:30:42 18 the benefits of auto capture. I relied upon the data she
02:30:47 19 provided and presented on MRDC failure rates.

02:30:51 20 So what we have below in PX-26 is the actual
02:30:56 21 source of where did this data come from that I relied upon.
02:31:00 22 And if you look at the second highlighted section, the
02:31:03 23 source of the data from Ms. Lockwood-Stein was from the
02:31:07 24 MRDC image scan stats summary dashboard in their Tableau
02:31:15 25 system.

02:31:15 1 Q. And this slide also has highlighted the phrase "the
02:31:19 2 commercial importance of auto capture technology." Could
02:31:22 3 you explain for the jury what was your understanding of
02:31:24 4 Ms. Lockwood-Stein's relationship to that topic?

02:31:26 5 A. Well, the notion here is the importance in reducing the
02:31:32 6 error rates and the actual then performance of the system
02:31:36 7 in fulfilling that objective is provided through this data.

02:31:39 8 Q. Do you have an understanding of whether or not
02:31:42 9 Ms. Lockwood-Stein was officially designated by Wells Fargo
02:31:46 10 to be its representative to provide the evidence on the
02:31:52 11 topic of commercial importance of auto capture?

02:31:56 12 A. Yes. So my understanding of a corporate representative
02:32:00 13 in a case like this is that Ms. Lockwood-Stein is not
02:32:03 14 speaking on behalf of herself, she's speaking as though --
02:32:07 15 on behalf of Wells Fargo as the entire corporation.

02:32:10 16 Q. And the snippet from Exhibit 26 that's on your slide,
02:32:13 17 was that something that she actually provided on behalf of
02:32:15 18 Wells Fargo at her deposition?

02:32:20 19 A. That's correct. My understanding is the data was
02:32:22 20 provided as an exhibit during her depo.

02:32:24 21 Q. What are we looking at on the next slide?

02:32:27 22 A. Okay. So what we have now is just one month's -- well,
02:32:31 23 just a snippet of the overall spreadsheet that was
02:32:34 24 provided. And this was the -- you know, the verified data
02:32:38 25 from -- officially from Wells Fargo that represented the

02:32:41 1 system.

02:32:42 2 And during her deposition, Ms. Lockwood-Stein
02:32:46 3 explained a couple of these different modes, and I'll
02:32:49 4 explain that to you, as well.

02:32:50 5 Q. Actually, before we get into walking through the
02:32:53 6 categories, what was the complete time period of data that
02:32:57 7 Ms. Lockwood-Stein provided on behalf of Wells Fargo?

02:33:00 8 A. So the data sheet upon which I built my analysis ran
02:33:04 9 from 2017 through 2019. And in there, there were a couple
02:33:12 10 of gaps. And so as I'll discuss in a few minutes, I had to
02:33:19 11 do some compensation for that.

02:33:20 12 Q. Did Wells Fargo formally provide through that process
02:33:22 13 any data for any other time frame beyond the 2017 to
02:33:27 14 partial year 2019 spreadsheet?

02:33:30 15 A. No. This -- this was the official data provided by
02:33:33 16 Ms. Lockwood-Stein as their corporate representative and
02:33:37 17 verified the source as having come from their Tableau
02:33:41 18 recordkeeping system.

02:33:41 19 Q. Could you explain for us what are the data categories
02:33:45 20 that have been blown up on your slide?

02:33:48 21 A. Sure. And you're going to hear these terms used quite
02:33:52 22 a bit, I think, over the next hour or two.

02:33:55 23 We have three different modes. If you look in
02:33:57 24 that first green box, it's titled MiSnap Status. So within
02:34:02 25 the MiSnap function that does auto capture, there are three

02:34:06 1 modes.

02:34:07 2 The first mode is video, and as Ms. Lockwood-Stein
02:34:10 3 testifies above, video shows the acceptance rate for video,
02:34:15 4 which is auto capture. So they're synonyms. Video mode is
02:34:20 5 auto capture.

02:34:21 6 Q. And what are the still and manual modes?

02:34:24 7 A. So the MiSnap still mode and the MiSnap manual mode,
02:34:31 8 both of these describe when the user holds the phone over
02:34:34 9 the check and presses the button to take the picture. It's
02:34:39 10 not the computer or the processor that determines when to
02:34:41 11 take the picture. It's the human. And that's what we mean
02:34:44 12 by manual or still.

02:34:45 13 And as you can see, if I may proceed, we've got
02:34:47 14 the next green box is the image scan passed rate. In other
02:34:53 15 words, how many passed? How many were good? And the
02:34:57 16 video, you're seeing on this particular month of data for
02:35:01 17 iOS, it was 88.8 percent. And you can see that the still
02:35:05 18 and manual modes, still was right at 69.99 percent, and
02:35:11 19 manual was 66.4 percent, but you can see they're roughly
02:35:15 20 the same. Pretty equivalent.

02:35:17 21 And then the last column is the failed count, and
02:35:20 22 that's just the inverse of the pass. You either pass or
02:35:25 23 you fail. So 88.8 pass, 11.2 failed in the case of auto
02:35:31 24 capture.

02:35:31 25 Q. So before we dig further into the numbers from the

02:35:35 1 spreadsheet, can you explain for us at a high level how do
02:35:39 2 these modes you just described, auto capture and manual,
02:35:42 3 actually look in the two parties, USAA and Wells Fargo's,
02:35:48 4 applications?

02:35:48 5 MR. MELSHEIMER: Your Honor, may we approach?

02:35:50 6 THE COURT: Approach the bench.

02:35:56 7 (Bench conference.)

02:36:04 8 THE COURT: Yes, sir.

02:36:04 9 MR. MELSHEIMER: May it please the Court. I think
02:36:05 10 we're getting into an inappropriate comparison of the two
02:36:09 11 products.

02:36:11 12 MS. GLASSER: Well, it's not inappropriate, but if
02:36:13 13 this is the time for the instruction, that makes perfect
02:36:16 14 sense.

02:36:16 15 MR. MELSHEIMER: The issue here, of course, before
02:36:18 16 the Court is not the comparison of the products but the
02:36:21 17 comparison of the product to the patent, and this -- this
02:36:23 18 would only serve to confuse the jury. It's inappropriate,
02:36:28 19 it's prejudicial.

02:36:28 20 THE COURT: I'll give the instruction at this
02:36:30 21 point that we discussed in chambers.

02:36:32 22 MS. GLASSER: Thank you, Your Honor.

02:36:33 23 MR. MELSHEIMER: Thank you.

02:36:34 24 (Bench conference concluded.)

02:36:40 25 THE COURT: Ladies and gentlemen of the jury, this

02:36:42 1 particular demonstrative slide and the testimony related to
02:36:45 2 it should not be considered for the issue of infringement.
02:36:49 3 It may be considered for other issues in the case.

02:36:52 4 Let's proceed.

02:36:54 5 MS. GLASSER: Thank you, Your Honor.

02:36:55 6 Q. (By Ms. Glasser) Sir, could you please explain what
02:36:58 7 are we looking at here on this slide?

02:37:01 8 A. Sure. And if I may ask -- yes, thank you for moving
02:37:06 9 that --

02:37:06 10 THE WITNESS: Thank you.

02:37:08 11 A. So what we have on this slide is the USAA
02:37:11 12 Deposit@Mobile app on the left, and the Wells Fargo Mobile
02:37:14 13 Deposit app on the right. And when the app begins
02:37:20 14 capturing in auto -- or begins operation in auto capture
02:37:24 15 mode, what you see are these live video frames, right?
02:37:27 16 And -- and you can tell it's live video because as you move
02:37:30 17 the phone around or you move the check around, you can see
02:37:32 18 it responding on the view screen the same as it is in -- in
02:37:36 19 real life. Sort of in a strikingly similar way between the
02:37:40 20 two.

02:37:40 21 You'll also notice on the Wells Fargo side, in the
02:37:44 22 lower right corner is this little picture of a camera. And
02:37:48 23 that's the actual manual button. So that if the user wants
02:37:52 24 to, when they're holding the phone, they can tap their
02:37:55 25 finger on that little icon of the camera there, and that's

02:37:58 1 how they take a manual picture.

02:38:01 2 Q. In the Wells Fargo application, do you have information
02:38:05 3 on approximately how often a user actually chooses to use
02:38:11 4 the manual capture?

02:38:12 5 A. The -- the data shows that the successful deposits --
02:38:18 6 94 or 95 percent of the successful deposits come from auto
02:38:22 7 capture, and only 5 percent or so come from manual capture.

02:38:30 8 Q. What are we looking at here?

02:38:32 9 A. So I just put a couple of items on these lists of
02:38:37 10 real-time analysis of video frames for image quality. It's
02:38:43 11 quite obvious from just a user's perspective that, for
02:38:47 12 instance, on positioning, if you're too far away from the
02:38:50 13 check, the app will pop up a little message that says, get
02:38:55 14 closer. And as you get closer, it takes the picture.

02:38:58 15 Q. What does that tell you? What's the significance of
02:39:01 16 that when you're observing that as -- as a user?

02:39:03 17 A. Well, so I note at the bottom, it's understandable just
02:39:06 18 from the use of the system that if a frame is not
02:39:08 19 acceptable, if it's not good, it's not going to capture.
02:39:11 20 It's discarded and it keeps gathering frames and giving you
02:39:17 21 feedback until it can get a good image.

02:39:20 22 Q. Actually let's pause your presentation for a moment.

02:39:23 23 MS. GLASSER: Could we call up Slide 99 from
02:39:27 24 Dr. Conte's presentation?

02:39:43 25 Q. (By Ms. Glasser) You were here for Dr. Conte's

02:39:46 1 examination?

02:39:46 2 A. The vast majority of it, yes.

02:39:49 3 Q. And there was some discussion during his presentation
02:39:56 4 about the various considerations that a machine may look to
02:40:01 5 or -- to determine whether a check is sufficient. Do you
02:40:05 6 recall that?

02:40:05 7 A. Those -- the list of monitoring criteria, yes.

02:40:30 8 MS. GLASSER: I'm sorry, Slide 99, please. Thank
02:40:35 9 you very much, Mr. Huynh.

02:40:36 10 Q. (By Ms. Glasser) Were you here in court when this
02:40:40 11 particular slide was shown on the cross-examination?

02:40:43 12 A. I was.

02:40:44 13 Q. And I wanted to ask you about the types of items on
02:40:47 14 this slide, the monitoring criterion.

02:40:51 15 First of all, to remind the jury at a high level,
02:40:54 16 where do the monitoring criterion come in, in the auto
02:40:59 17 capture method?

02:41:00 18 A. So as -- as you've heard, as those frames are flipping
02:41:04 19 by, 30 frames per second or thereabouts, the processor is
02:41:08 20 doing all these different comparisons of the quality of the
02:41:11 21 image it sees in front of itself with what it knows are the
02:41:14 22 important criteria for making sure that check could be read
02:41:18 23 by other computers and successfully processed as a deposit
02:41:21 24 down the road.

02:41:22 25 Q. And now when you as a banking executive back in the

02:41:28 1 days before auto capture were thinking about those types of
02:41:31 2 things, were they ever happening on the user's device?

02:41:34 3 A. Well, no. This was the breakthrough that USAA had.

02:41:38 4 Q. So where did they happen in the time before we had this
02:41:43 5 invention?

02:41:45 6 A. For all the years from the first image -- introduction
02:41:48 7 of image in the 1990s in check processing, or even '80s,
02:41:53 8 maybe, until USAA invented mobile remote deposit capture,
02:41:59 9 this was always done either on a server or on specialized
02:42:03 10 equipment --

02:42:03 11 MR. MELSHEIMER: Your Honor, Your Honor,
02:42:05 12 objection. May we approach?

02:42:06 13 THE COURT: Approach the bench.

02:42:08 14 (Bench conference.)

02:42:18 15 THE COURT: Yes, sir.

02:42:18 16 MR. MELSHEIMER: So, Your Honor, this is the issue
02:42:19 17 we've raised before about other patents. He just said they
02:42:23 18 invented mobile remote deposit capture.

02:42:27 19 MS. GLASSER: Oh, I can ask him to --

02:42:29 20 MR. MELSHEIMER: And that is not -- I'm sorry --

02:42:30 21 THE COURT: Let's finish and let's talk one at a
02:42:32 22 time.

02:42:33 23 MR. MELSHEIMER: I'm sorry.

02:42:34 24 So I think it is inappropriate. It was the
02:42:37 25 subject of a motion in limine excluding other patents and

02:42:39 1 things of that nature. And I just object to it and ask
02:42:42 2 that there be an instruction or a correction offered on the
02:42:45 3 record.

02:42:46 4 THE COURT: What's the Plaintiff's response?

02:42:47 5 MS. GLASSER: So he's talking about the
02:42:49 6 patents-in-suit. I think it's clear. I can get him to
02:42:52 7 clarify. But this is --

02:42:53 8 THE COURT: As long as he clarifies these are the
02:42:57 9 patents-in-suit, then I'll overrule the objection.

02:43:00 10 MS. GLASSER: Yes, Your Honor. Thank you.

02:43:01 11 THE COURT: And you can certainly reraise it if
02:43:03 12 you think they get into the unasserted patents. But we're
02:43:05 13 going to get it straight. He's either talking about the
02:43:08 14 patents-in-suit, or he needs to not talk about unasserted
02:43:12 15 patents.

02:43:12 16 MS. GLASSER: Yes, sir, yes, sir. Thank you, Your
02:43:14 17 Honor.

02:43:14 18 (Bench conference concluded.)

02:43:18 19 THE COURT: Let's proceed.

02:43:20 20 Q. (By Ms. Glasser) Sir, a point of clarification, when
02:43:22 21 you said before USAA invented mobile deposit, or words to
02:43:28 22 that effect, you were talking about the invention of auto
02:43:31 23 capture described in the patents-in-suit; is that right?

02:43:32 24 A. Yes, ma'am.

02:43:34 25 Q. Okay. With that clarification, could you continue your

02:43:37 1 response describing to us how this was done previously?

02:43:41 2 A. Sure. So at Bank of America and throughout the
02:43:46 3 industry, conventional thinking was that image quality
02:43:49 4 analysis was done on an image quality analysis server or
02:43:54 5 within this specialized industrial equipment I mentioned
02:43:57 6 earlier. The notion of doing it on a smartphone actually
02:44:01 7 was disbelieved at the time and was the motivation for
02:44:06 8 prototyping to show that it actually could be done.

02:44:14 9 MS. GLASSER: If we could have Mr. Calman's
02:44:16 10 presentation back, please.

02:44:18 11 Q. (By Ms. Glasser) All right. So in the USAA system, in
02:44:34 12 the Wells Fargo system, what happens if when those previews
02:44:39 13 are going by quickly, what happens if a frame does not meet
02:44:45 14 the required criteria?

02:44:48 15 A. So this is another element that you've heard about in
02:44:51 16 the USAA and the Wells Fargo system that -- that if it
02:44:55 17 doesn't meet criteria, that feedback is given to the user
02:44:59 18 to help them understand what needs to be done to create a
02:45:03 19 better image. To -- to allow the system to do its auto
02:45:11 20 capture.

02:45:12 21 Q. All right. So, ultimately, whether this proceeds
02:45:15 22 through the auto capture process or whether the user either
02:45:20 23 proceeds in that still mode or that manual mode, what
02:45:24 24 happens at the end?

02:45:25 25 A. So at the end, what you have is what I call the deposit

02:45:30 1 input form. It has a couple of different names. But
02:45:33 2 essentially what you have are these little tiny -- they're
02:45:36 3 called thumbnail images, so it's sort of miniature pictures
02:45:40 4 of the check and the amount that the -- the user keyed in.
02:45:43 5 It's a, you know, \$20.00 deposit, what have you, and the
02:45:46 6 checking account to which -- or the account to which I'm
02:45:49 7 depositing.

02:45:50 8 Only once those are all satisfied, does the
02:45:54 9 deposit button sort of light up and become active. So if
02:45:57 10 you haven't gotten two good images and you haven't entered
02:46:02 11 your account and entered the amount, that button is grayed
02:46:06 12 out. And no matter how hard you push it, it's not going to
02:46:09 13 work.

02:46:10 14 Both apps in the same way when those information
02:46:12 15 pieces are assembled and ready, only then does the deposit
02:46:14 16 button light up and the user pushes that button and that's
02:46:17 17 the actual submission to the bank.

02:46:20 18 Q. Okay. Going back to your analysis of the data, were
02:46:23 19 you able to analyze the complete data set provided by Wells
02:46:29 20 Fargo to determine on average whether there is a difference
02:46:33 21 between the failure rate through auto capture versus the
02:46:36 22 failure rate if someone is choosing the manual option?

02:46:40 23 A. So I was able to use the official verified data from
02:46:44 24 Ms. Lockwood-Stein to compute the difference in performance
02:46:48 25 over that time frame, over that -- almost three-year time

02:46:52 1 frame between the manual capture mode at Wells Fargo and
02:46:54 2 the auto capture mode.

02:46:56 3 And what we see on the left is that -- some
02:47:00 4 slightly different values for manual and still, 32.45 for
02:47:05 5 manual, 28.59 for -- for still. But together about an
02:47:11 6 average failure rate for manual modes of 30.52 percent, and
02:47:17 7 that compares to an auto capture average failure rate of
02:47:20 8 10.38 percent.

02:47:22 9 That's a decrease of two-thirds, and it explains
02:47:31 10 why auto capture is a must-have feature. If I may, think
02:47:35 11 back to those hundred users. Out of a hundred users using
02:47:38 12 manual capture, 30 percent were having problems. Auto
02:47:41 13 capture, only 10 people or so, a little more, out of a
02:47:44 14 hundred were having the same kind of problems. And so it's
02:47:47 15 a two-thirds decrease in rate of failure.

02:47:54 16 Q. All right. After you -- I'm sorry, is it possible for
02:48:02 17 you to clear that? There's some purple on the screen.

02:48:06 18 A. I've been watching the Judge. Let's see if I can do
02:48:10 19 it.

02:48:10 20 Q. Perfect, thank you.

02:48:10 21 THE COURT: You can also do it from the podium,
02:48:14 22 counsel.

02:48:14 23 MS. GLASSER: Oh.

02:48:14 24 THE COURT: Let's proceed.

02:48:15 25 MS. GLASSER: I should be doing it, thank you,

02:48:16 1 Your Honor.

02:48:16 2 Q. (By Ms. Glasser) After you did the calculation of
02:48:18 3 failure rate reduction, what was the next aspect of your
02:48:22 4 analysis?

02:48:22 5 A. So no single operational measure like that failure rate
02:48:30 6 can tell you the whole story. In order to understand and
02:48:33 7 do this apportionment analysis, you need to understand more
02:48:37 8 about the customer's experience over time with an app. You
02:48:41 9 know, you can't just look at one single value to tell you
02:48:44 10 the answer to the question.

02:48:46 11 And so my next step was to look at the customer
02:48:51 12 experience over a 30-, 60-, and 90-day time frame.

02:48:55 13 Q. Okay. So walk us through that. You initially
02:48:58 14 highlighted the failure rate data. Now, what did you do
02:49:01 15 next with that data?

02:49:02 16 A. Right. So on this slide, it's -- it's really just a
02:49:05 17 summary of what I've just talked through. Remember, USAA's
02:49:09 18 failure rate showed that before and after of a 41 percent
02:49:14 19 improvement.

02:49:14 20 I just talked through Wells Fargo's experience.
02:49:17 21 The difference between their system's performance for auto
02:49:22 22 capture and manual capture, a 66 percent improvement.

02:49:27 23 But as I said, that doesn't tell the whole story.
02:49:30 24 We need to look at more stuff.

02:49:31 25 And so I used some statistical analysis and a

02:49:34 1 computation called yield analysis, I'll talk about, to try
02:49:39 2 and understand, okay, what's it like for an actual person
02:49:42 3 using this app over a one, two, and three-month period of
02:49:46 4 time.

02:49:47 5 Q. From a banking operations standpoint, why is it
02:49:52 6 important to look at that one, two, or three-month
02:49:55 7 experience rather than just a single point in time?

02:49:57 8 A. Oh, sure. It's -- so every day is different at a bank.
02:50:02 9 It -- it -- whether it's a day of a week or it's payday or
02:50:06 10 there was a three-day weekend or even weather, bad weather
02:50:11 11 can affect whether people are going to the branch or not,
02:50:13 12 every day of transactions are different.

02:50:15 13 And so it's just not right to look at one or two
02:50:19 14 or three days. You have to look at the performance of a
02:50:21 15 system over one month or multiple months because people's
02:50:24 16 business cycles and personal transactions just vary so
02:50:27 17 much.

02:50:28 18 Q. So what data did you use to perform this error free
02:50:36 19 one, two, three-month analysis?

02:50:36 20 A. So I went back to the official verified data from
02:50:39 21 Ms. Lockwood-Stein. And as I mentioned a few moments ago,
02:50:42 22 there were a couple of gaps in that data. It just wasn't a
02:50:46 23 perfect datastream. I understand there were some changes
02:50:49 24 in their recordkeeping methods through that time.

02:50:51 25 So what I was able to do was to find a span of 10

02:50:55 1 months from January of '18 through October of 2018 where
02:50:59 2 the data was clean. It was good, and I could use it.

02:51:04 3 Q. Can you describe for us, sir, what did you do with that
02:51:08 4 data?

02:51:08 5 A. Okay. So the data told us that, on average, Wells
02:51:13 6 Fargo customers make about two deposits with MRDC per
02:51:17 7 month. That's two checks, right? And each check -- in
02:51:22 8 order to deposit a check, you've got to do the front and
02:51:25 9 the back, so there's two scans for every deposit.

02:51:28 10 Using the performance numbers as error free
02:51:32 11 numbers that we looked at a moment ago, when you compute
02:51:35 12 that across for just about two deposits per month and two
02:51:39 13 sides per check, what you find is that over the course of a
02:51:44 14 30-day period or a one-month period, auto capture provides
02:51:48 15 61.17 percent of customers with an error free experience,
02:51:52 16 all's good, all's clean.

02:51:55 17 Whereas, manual capture customers -- those
02:51:58 18 customers who choose to push the button themselves, only
02:52:01 19 about 21.5 -- well, exactly 21.55 percent of the customers
02:52:07 20 get an error free experience. And what that means is, on a
02:52:10 21 one-month basis, auto capture gives 2.84 times better
02:52:18 22 experience to customers in giving them error free
02:52:21 23 operation.

02:52:21 24 Q. Well, what happens when you extend that analysis out to
02:52:24 25 the two-month time frame?

02:52:26 1 A. Sure. So two months now, it's two deposits per month.

02:52:30 2 Now, it's two months, four deposits, two sides per, and you

02:52:35 3 start to see the power of compounding here, right?

02:52:38 4 So now, over a two-month basis, 37.62 percent of

02:52:44 5 those auto capture using customers, they're getting error

02:52:47 6 free experience. All smooth, no problems.

02:52:50 7 Now, only 4.36 percent of the people who choose to

02:52:53 8 do manual capture are getting no errors, and that's 8.63

02:52:59 9 times better for auto capture as compared to manual.

02:53:01 10 Q. Briefly summarize for us what happens when you extend

02:53:05 11 it out to three months?

02:53:07 12 A. Now, at this point, 90 days, as you imagine, 22.75

02:53:12 13 percent of auto capture, almost a quarter of the auto

02:53:14 14 capture customers, are still getting error free performance

02:53:17 15 over a full three-month period.

02:53:19 16 Not even 1 percent of manual capture customers

02:53:22 17 have been error free, meaning almost everybody -- 99 out of

02:53:26 18 a hundred customers using manual customer have had some

02:53:29 19 sort of error. And that's more than 25 times better using

02:53:33 20 auto capture than using manual capture.

02:53:35 21 Q. Now, when you describe customers going a month or two

02:53:39 22 months or three months with no errors, what types of errors

02:53:43 23 are we talking about?

02:53:44 24 A. So it depends. For some, in some cases, it's just a

02:53:49 25 matter of a couple of seconds, I need to take another set

02:53:53 1 of pictures, front and back, and things go through.

02:53:55 2 On the other hand, it may mean that that customer
02:53:58 3 just can't get their check deposited. They can't get --
02:54:00 4 they can't make it happen with their phone, and they've got
02:54:02 5 to find another way to get that deposit made. And that's a
02:54:05 6 problem for the customer, and that's a problem for the
02:54:08 7 bank, too.

02:54:08 8 Q. Why is it a problem for the bank?

02:54:10 9 A. Well, the bank -- they have a lot of expense in dealing
02:54:15 10 with these errors and in creating -- in sort of the
02:54:21 11 resolution processes when there's -- some of the types of
02:54:24 12 errors we're talking about.

02:54:25 13 Q. Now, how did you go about translating all of this
02:54:30 14 analytical work that you've done into an apportionment of
02:54:33 15 value?

02:54:33 16 A. So using the data that we've just accumulated, what we
02:54:39 17 can do is figure out what proportion of those error free
02:54:43 18 experiences are thanks to auto capture.

02:54:46 19 So, again, out of a hundred folk, on average, 79
02:54:52 20 percent or 79 people out of a hundred who've had an error
02:54:56 21 free experience, well, they have auto capture to thank for
02:54:58 22 that. That's what auto capture does in terms of creating
02:55:02 23 error free experiences.

02:55:04 24 But, you know, like I said earlier, no single
02:55:07 25 number can tell the whole story. Even a basketful of

02:55:13 1 numbers can't always tell you the full story. There's
02:55:16 2 always other factors that go into creating a -- a -- the
02:55:19 3 difference between a model and real life, right? There's
02:55:22 4 things you just don't know.

02:55:23 5 As I mentioned, it could be the geography, how
02:55:26 6 close am I to an ATM or a branch if I have to go there
02:55:31 7 instead? You know, is it month end? Do I really need this
02:55:34 8 money in this deposit? Will I keep trying because I really
02:55:35 9 need the money, or is it just a, you know, \$2.00 check from
02:55:38 10 my nephew. It -- it all depends.

02:55:40 11 And because the model can't capture all those
02:55:43 12 things, it's very typical in my experience that you -- you
02:55:47 13 have the results of your model to account for all of those
02:55:52 14 unknowns.

02:55:52 15 So instead of the 79 percent, I took half and went
02:55:57 16 with a 40 percent apportionment factor because we just
02:56:01 17 don't know enough to be able to say for sure it's 79
02:56:05 18 percent.

02:56:05 19 Q. How frequently in the banking industry have you seen
02:56:08 20 this approach employed of accounting for the unknowns by
02:56:13 21 conservatively reducing a projection by half?

02:56:17 22 A. So I had nearly three decades in the banking business
02:56:21 23 doing operational forecasting and modelling and
02:56:24 24 understanding these kinds of things. I used it for years.
02:56:27 25 It was a common practice. And we even saw that Wells Fargo

02:56:32 1 used the same approach.

02:56:34 2 Q. In addition to the calculations that you've presented
02:56:37 3 to the jury so far, did you identify any other insights
02:56:42 4 regarding the value to be properly apportioned to the
02:56:45 5 patented auto capture technology?

02:56:46 6 A. So as I've said, no one answer or no one model can tell
02:56:52 7 you all the answers. So I took another angle at this
02:56:57 8 question, and I looked at the impact of leadership --
02:57:00 9 mobile leadership on the growth of Wells Fargo's system and
02:57:04 10 how fast it grew.

02:57:06 11 And what I adopted was a well-known piece of
02:57:10 12 research and product in the industry called the Net
02:57:16 13 Promoter System.

02:57:16 14 Now, you may be familiar with Net Promoter System.
02:57:18 15 If you've ever gotten a survey that says, on a scale from 1
02:57:22 16 to 10, how likely are you to recommend our service to a
02:57:24 17 friend? If you've ever seen a survey question like that,
02:57:29 18 that's Net Promoter System. That's Net Promoter Score.
02:57:33 19 It's all about that one question.

02:57:35 20 So what Bain did is they looked across multiple
02:57:39 21 industries over a long period of time to understand the
02:57:42 22 impact of Net Promoter scores on growth. And their insight
02:57:49 23 is that leaders in customer experience, companies with high
02:57:54 24 Net Promoter scores where lots of people would recommend
02:57:57 25 their service to a friend, experience more than two times

02:58:01 1 the growth factor -- the growth rate as their average
02:58:03 2 competitors.

02:58:06 3 Q. So how does this insight from the Bain research -- the
02:58:12 4 Bain study, how does that provide you with insight into the
02:58:19 5 portion of value attributable to auto capture?

02:58:21 6 A. So Bain teaches us that leaders in this Net Promoter
02:58:25 7 Score can expect more than two times growth over time as
02:58:28 8 compared to their competitors.

02:58:31 9 We knew by 27 -- 2017 -- and the Futurion report
02:58:35 10 backs this up -- that auto capture was a must-have feature.
02:58:40 11 It was necessary to be a leader. And we've highlighted --
02:58:42 12 I've highlighted a line on the top that notes that Chase
02:58:46 13 Bank -- Chase Bank slipped from the top 10 because they
02:58:50 14 only had manual capture. They couldn't maintain a
02:58:54 15 leadership position without auto capture.

02:58:56 16 And so when I put those two together, it helped me
02:59:01 17 to reforecast, well, what if -- what if Wells Fargo had not
02:59:04 18 launched auto capture and only had a manual capture
02:59:07 19 solution like Chase Bank? And what I was able to do was
02:59:12 20 mathematically demonstrate with a model that 42 percent of
02:59:16 21 the growth that Wells Fargo had with their mobile remote
02:59:19 22 deposit capture system was thanks to auto capture.

02:59:25 23 Q. Now, earlier, you mentioned that you used the data from
02:59:28 24 Wells Fargo's corporate representative that was supplied as
02:59:31 25 part of the litigation process; is that right?

02:59:33 1 A. Yes, ma'am.

02:59:34 2 Q. After you submitted your expert report in this matter,

02:59:38 3 did you see further information provided later by Wells

02:59:45 4 Fargo through one of its experts regarding failure data?

02:59:49 5 A. I did. This spreadsheet was referenced in

02:59:54 6 Dr. Villasenor's report. This is the iOS sheet. This is

02:59:59 7 the entirety of the data for iOS. There was another

03:00:02 8 similar looking table for Android, but this is it.

03:00:06 9 And -- and what it contains are a couple of days

03:00:12 10 of data. So you see at the top we've got May the 8th, and

03:00:15 11 we've got September the 5th, and we've got that data from

03:00:19 12 that day, May the 8th, and we've got a -- a data point from

03:00:25 13 September the 5th.

03:00:27 14 Q. And you mentioned, I think, that this was all of the

03:00:31 15 data, apart from a similar spreadsheet on Android. Are we

03:00:36 16 literally looking on this screen at all of the iOS data

03:00:39 17 that was identified by Dr. Villasenor for this point?

03:00:42 18 A. That's right. This is what I call point data or

03:00:45 19 point-in-time data. This is not a series of days or months

03:00:49 20 or years worth of data. This is just a snapshot of a

03:00:54 21 particular day before a change and a particular day, it

03:00:57 22 says here, after a MiSnap update. So that's all it is.

03:01:01 23 Q. In your experience in banking industry operations, is

03:01:05 24 single-day data helpful in performing analysis?

03:01:11 25 A. Well, no. As I mentioned before, this is just not how

03:01:15 1 it's done. You -- you don't know what day -- well, we know
03:01:17 2 what day of the week it was. We don't know what the
03:01:19 3 weather was that day. We don't know was -- were there
03:01:22 4 paydays around there? Was there -- were there other -- we
03:01:26 5 don't -- it's just a single day.

03:01:28 6 And because people's business cycles and
03:01:30 7 business's business cycles are all different, everybody's
03:01:33 8 different, we always, always look at 30, 60, 90, and even
03:01:38 9 longer time frames so we can smooth out all of those
03:01:41 10 differences between those days. It's just not right to
03:01:44 11 pick one day and compare it to one other day. It just
03:01:48 12 doesn't give you a valuable insight.

03:01:49 13 Q. Understanding that your views on the data is that it's
03:01:53 14 not particularly helpful, did you nonetheless in an
03:01:56 15 abundance of caution construct a new model using the data
03:02:01 16 supplied by Mr. Villasenor?

03:02:04 17 A. I did. Excuse me for the eyedrops. I did.

03:02:07 18 Q. And actually, I misspoke for a moment. This is Wells
03:02:10 19 Fargo data that was attached to Mr. Villasenor's report,
03:02:14 20 correct?

03:02:14 21 A. Yes, ma'am.

03:02:14 22 Q. And you did go ahead and run a model to see what it
03:02:19 23 would produce if you used this point in time, correct?

03:02:22 24 A. I did. And, as I said, this is not the official
03:02:25 25 verified data from Wells Fargo, nor do I agree that it's

03:02:29 1 appropriate to use this data for modelling. Nevertheless,
03:02:34 2 I plugged that data into the exact same model that I showed
03:02:37 3 you earlier.

03:02:39 4 And using the May 8th manual capture rate data and
03:02:43 5 the Wells Fargo expectation for auto capture, 90 percent --
03:02:47 6 you recall they were expecting a 90 percent rate. And, in
03:02:51 7 fact, they did get 90 percent rate. That was what they --
03:02:54 8 their operational system was doing.

03:02:56 9 When I use this single point-in-time data, it just
03:02:58 10 still further confirms that auto capture at this point in
03:03:03 11 time was 1.7 times -- 78 times better at producing error
03:03:08 12 free customer experience.

03:03:09 13 Q. Sir, taking together all of the different points of
03:03:17 14 analysis that you performed and described in your report,
03:03:19 15 what is your ultimate conclusion on how we quantify the
03:03:23 16 value of the auto capture patents?

03:03:25 17 A. Right. So to recap, we looked at error performance
03:03:29 18 data, we looked at customer experience data, we looked at
03:03:31 19 the Bain insights, we even confirmed it with this
03:03:37 20 extraneous supplemental data. Everything comes down to my
03:03:42 21 opinion that at least 40 percent of the value of mobile
03:03:48 22 deposit is attributable to auto capture.

03:03:52 23 Q. Thank you very much, sir.

03:03:54 24 MS. GLASSER: I pass the witness.

03:03:55 25 THE COURT: Counsel, approach the bench, please.

03:03:56 1 (Bench conference.)

03:04:04 2 THE COURT: I'm going to give the jury a short
03:04:08 3 recess at this point. You all take a couple minutes to
03:04:14 4 compare notes, and then let my law clerks know where we
03:04:19 5 stand on those disputes that we talked about this morning
03:04:22 6 that I carried. Okay?

03:04:23 7 MR. MELSHEIMER: Your Honor, we're probably going
03:04:24 8 to want to bring up an issue that's been raised by
03:04:27 9 Mr. Calman's testimony regarding some of these issues that
03:04:29 10 we've talked about at other banks and whether or not the
03:04:34 11 other banks used auto capture or manual capture, and we're
03:04:38 12 just going to want a minute to talk about that before we go
03:04:41 13 into cross-examination.

03:04:43 14 MS. GLASSER: We had understood that was resolved
03:04:44 15 this morning; that you agreed you are not going to do that.

03:04:48 16 THE COURT: You all talk, and I'll see you before
03:04:52 17 I bring the jury back in.

03:04:54 18 MR. MELSHEIMER: Thank you, Your Honor.

03:04:57 19 (Bench conference concluded.)

03:04:57 20 THE COURT: Ladies and gentlemen of the jury,
03:04:59 21 before the Defendant cross-examines Mr. Calman, we're going
03:05:03 22 to take a short recess.

03:05:05 23 You may simply leave your notebooks closed and in
03:05:08 24 your chairs. Please follow all the instructions I have
03:05:11 25 given you about your conduct during the trial, including,

03:05:14 1 of course, not to discuss the case among yourselves and
03:05:15 2 we'll have you back in here shortly to continue. The jury
03:05:23 3 is dismissed for recess.

03:05:26 4 COURT SECURITY OFFICER: All rise.

03:05:47 5 (Jury out.)

03:05:47 6 THE COURT: Counsel, take 10 minutes to consult
03:05:52 7 with each other about those issues that were left open from
03:05:55 8 our meeting this morning in chambers, and then see me in
03:05:57 9 chambers. Court stands in recess.

03:06:02 10 COURT SECURITY OFFICER: All rise.

03:06:03 11 (Recess.)

03:41:10 12 (Jury out.)

03:41:11 13 COURT SECURITY OFFICER: All rise.

03:41:13 14 THE COURT: Be seated, please.

03:41:13 15 All right. Are you prepared to undertake
03:41:19 16 cross-examination, Mr. Melsheimer?

03:41:21 17 MS. GLASSER: Your Honor, we have something to
03:41:23 18 address at sidebar, if we could, before we begin.

03:41:27 19 THE COURT: All right. Tell me what that is.

03:41:28 20 MS. GLASSER: It has to do with the discussion in
03:41:31 21 chambers about the document to potentially be used during
03:41:33 22 the cross-examination. We now have a copy of it.

03:41:37 23 THE COURT: All right.

03:41:40 24 MS. GLASSER: May we approach, or should we do it
03:41:42 25 in open court? I'm concerned about doing it in front of

03:41:46 1 the witness.

03:41:46 2 THE COURT: Approach the bench.

03:41:47 3 (Bench conference.)

03:41:57 4 MS. GLASSER: So we have the document now. It's

03:42:00 5 not actually a statement of the witness at all. This

03:42:03 6 witness never worked at Merrill Lynch. The witness is

03:42:07 7 saying he got this from somebody named Pete Buchhop.

03:42:13 8 THE COURT: I thought I asked you in chambers,

03:42:15 9 Mr. Melsheimer, if this was a direct statement of the

03:42:17 10 witness.

03:42:17 11 MR. MELSHEIMER: It is his statement in his

03:42:21 12 report, Your Honor, that he prepared for RPX. That is the

03:42:24 13 statement that he writes in his report and his findings. I

03:42:27 14 don't know --

03:42:27 15 THE COURT: He included a statement from someone

03:42:29 16 else in his report is effectively what this looks like.

03:42:34 17 MR. MELSHEIMER: I'm not sure if that's right or

03:42:35 18 not, Your Honor. Actually -- but I'm happy to -- he wrote

03:42:44 19 that in his report. Now, whether he'd say he didn't

03:42:47 20 believe it or someone else told him that, but that -- this

03:42:50 21 is his report that he authored.

03:42:55 22 MS. GLASSER: And I think the report is a

03:42:57 23 significant overstatement. Now that we've seen it, it's

03:43:02 24 kind of his initial findings of a couple of areas of things

03:43:03 25 that could be done and things that he looked at.

03:43:06 1 And here he said he had an initial phone call of
03:43:09 2 this person. There were a few more pages to it, too.

03:43:23 3 MR. MELSHEIMER: I mean, he could say, you know, I
03:43:25 4 didn't -- I didn't believe that, but that's what this guy
03:43:28 5 told me. I don't have -- I've never asked him about it,
03:43:30 6 Judge, so I don't know one way or the other. But that is
03:43:33 7 the statement that --

03:43:34 8 THE COURT: I see it. I see it. It's under
03:43:37 9 heading marked expert conversations for discussion with RPX
03:43:42 10 prior to contact.

03:43:43 11 Then it references Pete Buchhop, STA Group, former
03:43:53 12 colleague, tech fellow at Bank of America Merrill Lynch.

03:44:00 13 Then below it, without any attribution, it says,
03:44:00 14 principal developer of Merrill Lynch app first mobile
03:44:03 15 deposit app to automatically take a photo of a check for
03:44:09 16 image check deposit.

03:44:09 17 It's unclear that that is -- it appears, but it's
03:44:12 18 unclear that that's Mr. Buchhop's statement, and that
03:44:17 19 Mr. Calman included it in this report.

03:44:19 20 It could be Mr. Calman's characterization of his
03:44:23 21 conversation with Mr. Buchhop. I don't know. But it is
03:44:27 22 far from a direct statement clearly attributable to the
03:44:31 23 witness that is inconsistent with his testimony.

03:44:35 24 MR. MELSHEIMER: Well, Your Honor, can I just say
03:44:38 25 it is attributable to the witness. He wrote it. He put it

03:44:41 1 together. Now, it may be that he's got some layers of
03:44:44 2 hearsay about it. But it is absolutely attributable to
03:44:47 3 him. He put it in the report.

03:44:49 4 MS. GLASSER: Also, it's not at all impeaching
03:44:51 5 because the testimony that he was trying to impeach was
03:44:54 6 that -- was that USAA was the pioneer in this industry.
03:44:59 7 USAA developed the first product back in 2006. This
03:45:04 8 patent, of course, was conceived 2008. So this doesn't
03:45:11 9 contradict this at all if he's saying --

03:45:14 10 THE COURT: Please don't touch those.

03:45:15 11 MS. GLASSER: Sorry, Your Honor.

03:45:16 12 THE COURT: That's fine. They just cause pain in
03:45:18 13 the ears of the court reporter.

03:45:20 14 MS. GLASSER: Okay. We don't want that. So,
03:45:22 15 anyway, the bigger point is it's not his own statement, but
03:45:26 16 I don't think it would be impeaching, in any event.

03:45:28 17 MR. MELSHEIMER: I think it goes to the weight of
03:45:30 18 the impeachment, Your Honor, the way they would explain it.
03:45:32 19 I don't think it goes to the -- including the notion that
03:45:36 20 he was repeating something someone else told him. It's not
03:45:39 21 apparent from the face of the document that that's true. I
03:45:41 22 don't know that that's true. But --

03:45:44 23 MS. GLASSER: The only way for him to try to
03:45:47 24 explain it is to go down this path of what was this
03:45:50 25 analysis he was doing for RPX -- this is actually clearly a

03:45:56 1 privilege document.

03:45:57 2 Maybe RPX decided to waive the privilege for
03:46:00 3 Mr. Melsheimer, but he's going to feel very, very
03:46:02 4 uncomfortable what it is he can talk about about that
03:46:05 5 analysis and what he can't. He undoubtedly has an
03:46:09 6 agreement with RPX or their counsel regarding whatever this
03:46:12 7 work was that he did.

03:46:13 8 THE COURT: How did this come to be in your hands,
03:46:16 9 Mr. Melsheimer?

03:46:16 10 MR. MELSHEIMER: Your Honor, I'm not -- I
03:46:17 11 personally do not know. I believe we got it through
03:46:22 12 someone at -- someone at Wells Fargo that had some
03:46:26 13 connection with RPX. I honestly -- I don't want to give an
03:46:29 14 answer without having --

03:46:30 15 THE COURT: I'm just asking what you know.

03:46:32 16 MR. MELSHEIMER: I know we -- we have this in the
03:46:35 17 research we did about Mr. Calman. I just -- I don't know
03:46:38 18 who provided us this document.

03:46:40 19 MS. GLASSER: And Mr. Calman has -- they
03:46:43 20 represented Mr. Calman at one point in time. So that's a
03:46:48 21 whole other layer of this. Mr. Melsheimer, I think, put
03:46:52 22 him on at trial at one point or deposition. So it's going
03:46:54 23 to be a whole web of confidential privileged information
03:46:57 24 that is not at all related to any issue in this case.

03:47:01 25 MR. MELSHEIMER: Your Honor, I never represented

03:47:03 1 Mr. Calman.

03:47:04 2 THE COURT: I'm not -- I'm not going to get into
03:47:06 3 any potential conflicts or breaches of confidentiality
03:47:10 4 agreements. Those are between you all and whoever you may
03:47:13 5 have made those confidential commitments to.

03:47:21 6 MR. MELSHEIMER: Well, I haven't made any, Your
03:47:21 7 Honor --

03:47:22 8 THE COURT: I'm just not going to get into that.
03:47:26 9 In my mind, is this an appropriate document for
03:47:30 10 impeachment?

03:47:30 11 Mr. Melsheimer, I'm going to allow you to ask the
03:47:32 12 witness if he's familiar with this report and did he
03:47:37 13 include this statement in the report.

03:47:42 14 Now, he could say, that was not my statement.
03:47:44 15 That was somebody else's. I put it in there for the
03:47:47 16 benefit of the client. But you are only going to use this
03:47:50 17 one line that you've underlined here.

03:47:51 18 MR. MELSHEIMER: That's right. Your Honor, when
03:47:54 19 you said I can preface it by saying, you told the jury
03:48:00 20 earlier, that's the whole impeachment aspect of it.

03:48:02 21 THE COURT: You can reference what he told the
03:48:04 22 jury earlier.

03:48:05 23 MR. MELSHEIMER: Yes, sir.

03:48:06 24 THE COURT: And then you can ask him about this,
03:48:08 25 but you cannot -- you cannot portray it as if he personally

03:48:11 1 said it because that's an issue that -- that's not clear
03:48:15 2 here. It could be. It may not be. It is clear that he
03:48:19 3 included this statement in a report that he wrote.

03:48:22 4 MR. MELSHEIMER: Okay.

03:48:22 5 THE COURT: And he can respond to that, whether,
03:48:25 6 yes, I put it in there, but that doesn't mean I believed
03:48:27 7 it. I didn't say it. That wasn't me. He can respond
03:48:30 8 however is appropriate.

03:48:31 9 MS. GLASSER: And then that's the end of it; is
03:48:33 10 that right?

03:48:33 11 THE COURT: And then that is the end of it. We
03:48:35 12 move on. Okay.

03:48:36 13 MS. GLASSER: This is actually my copy.

03:48:38 14 MR. MELSHEIMER: Oh, that's yours. You can take
03:48:40 15 it.

03:48:40 16 (Bench conference concluded.)

03:48:40 17 THE COURT: All right. Let's bring in the jury,
03:48:42 18 please.

03:48:42 19 COURT SECURITY OFFICER: All rise.

03:48:43 20 (Jury in.)

03:49:08 21 THE COURT: Please be seated.

03:49:11 22 All right. We'll proceed with cross-examination
03:49:17 23 of the witness by the Defendant.

03:49:19 24 MR. MELSHEIMER: May it please the Court.

03:49:19 25 CROSS-EXAMINATION

03:49:20 1 BY MR. MELSHEIMER:

03:49:20 2 Q. Mr. Calman, good afternoon, sir.

03:49:22 3 A. Good afternoon.

03:49:22 4 Q. Let's see if there's some things you and I can agree
03:49:25 5 on.

03:49:26 6 You made a number of conclusions in this case
03:49:30 7 regarding the commercial value of what you call the
03:49:35 8 technology at issue, fair?

03:49:36 9 A. Yes, sir.

03:49:38 10 Q. And when you say the technology at issue, you are
03:49:42 11 talking about the technology claimed in the specific
03:49:46 12 patents in front of the jury, true?

03:49:48 13 A. Yes, sir, auto capture.

03:49:50 14 Q. You're not talking about some other technology, right?

03:49:54 15 A. No.

03:49:56 16 Q. You state that -- well, you just told us auto capture.
03:50:04 17 Now, you understand, though, sir, that the patents in this
03:50:08 18 case describe doing auto capture in a particular way, true?

03:50:14 19 A. The patents describe what is called in the industry
03:50:20 20 auto capture.

03:50:21 21 Q. And -- and -- and performing auto capture using the
03:50:27 22 specific set of steps, true?

03:50:29 23 A. What is claimed in the patents, yes, sir.

03:50:32 24 Q. And you're not saying and you're not telling the jury
03:50:36 25 that the patents claim manual capture, right?

03:50:40 1 A. No, these patents are all about auto capture.

03:50:43 2 Q. Auto capture with a specific set of steps as laid out

03:50:47 3 in the claims of the patent. Can we agree on that?

03:50:50 4 A. Patent claims describe auto capture, yes, sir.

03:50:55 5 Q. Let me try this -- I just want to make sure you and I

03:50:58 6 are communicating.

03:51:00 7 The patent claims describe auto capture in a

03:51:02 8 specific set of steps that must be performed in the claims

03:51:06 9 of the patent; is that correct, sir?

03:51:09 10 A. The claims describe auto capture, yes, sir.

03:51:16 11 MR. MELSHEIMER: Your Honor, I will just -- I

03:51:18 12 would object as non-responsive because he's leaving off the

03:51:20 13 specific set of steps. I don't think I'm getting an answer

03:51:23 14 to that.

03:51:24 15 THE COURT: Ask your question again, counsel.

03:51:27 16 Q. (By Mr. Melsheimer) Mr. Calman, you understand that

03:51:32 17 auto capture, as described in these patents, the patent

03:51:35 18 claims, have a specific set of steps, true?

03:51:38 19 A. Yes, sir.

03:51:41 20 Q. And that's the technology you're talking about in terms

03:51:45 21 of your valuation, correct?

03:51:48 22 A. Yes, that's right.

03:51:50 23 Q. Now, you have told the jury that you think that

03:51:58 24 technology, the patent claims at issue, contributes a

03:52:03 25 certain percentage to the value of mobile deposit as a

03:52:06 1 whole to Wells Fargo. Do I have that right?

03:52:11 2 A. Yes. I did an apportionment of auto capture as the

03:52:16 3 value it contributes to the new channel of mobile remote

03:52:20 4 deposit capture.

03:52:20 5 Q. And -- and you say that the auto capture, as described

03:52:25 6 in the claims of these patents, is responsible for 40

03:52:29 7 percent of the entire value of remote -- mobile remote

03:52:36 8 deposit, right?

03:52:36 9 A. Repeat that one more time.

03:52:41 10 Q. It's your testimony that the auto capture, as defined

03:52:44 11 in the claims of these patents, is responsible for 40

03:52:48 12 percent of the value of the entire mobile remote deposit

03:52:57 13 system?

03:52:57 14 A. Yes, that's correct.

03:52:58 15 Q. Now, you do a number of calculations to get to that

03:53:02 16 valuation, don't you, sir?

03:53:03 17 A. I did.

03:53:05 18 Q. Okay. Now, I want to talk about this idea, though,

03:53:09 19 that -- I want to talk about sort of the ultimate --

03:53:15 20 THE COURT: Don't tell him what you want to talk

03:53:18 21 about. Ask him a question.

03:53:19 22 MR. MELSHEIMER: Thank you, Your Honor. I was

03:53:21 23 pausing for a minute.

03:53:22 24 A. I'm fine. Please continue.

03:53:23 25 Q. (By Mr. Melsheimer) Okay. You had decades of

03:53:28 1 experience in banking, true, sir?

03:53:30 2 A. Yes, indeed.

03:53:31 3 Q. Going way back to the 1980s, right?

03:53:35 4 A. Yes, sir.

03:53:35 5 Q. Started working in small banks and ended up working in

03:53:40 6 the largest bank in the United States, right?

03:53:43 7 A. It was at that time, yes, sir.

03:53:46 8 Q. Bank of America, right?

03:53:47 9 A. That's the one.

03:53:48 10 Q. Now, you became familiar in your experience at Bank of

03:53:52 11 America and, subsequently, with mobile deposit systems,

03:53:56 12 right?

03:53:56 13 A. I did.

03:53:56 14 Q. And mobile deposit is listed as one of the areas of

03:53:59 15 expertise in your resume; is that right?

03:54:02 16 A. It is.

03:54:03 17 Q. And to quote it, you say: Mobile deposits, including

03:54:08 18 early development and testing of the technology,

03:54:12 19 deployment, and UI innovation.

03:54:15 20 Does that sound familiar?

03:54:16 21 A. That's from my CV, yes, sir.

03:54:19 22 Q. UI is user interface, right?

03:54:21 23 A. Yes. It's also sometimes called user experience, as

03:54:27 24 well.

03:54:27 25 Q. User experience and user interface, that's how the

03:54:33 1 user, if you will, interacts with the particular
03:54:37 2 application, right?

03:54:38 3 A. That's that human computer interface, that's right.

03:54:42 4 Q. Whether you have to push buttons or touch things on the
03:54:48 5 screen and all that sort of stuff, that's -- that's what we
03:54:52 6 think of when we think of the user experience, right?

03:54:55 7 A. User experience can be more than that, but it does
03:54:59 8 include those things you mentioned.

03:55:00 9 Q. And so is it fair to say that you had a pretty good
03:55:06 10 understanding of mobile deposit systems when they were just
03:55:12 11 manual capture?

03:55:16 12 A. Well, some of them, yes.

03:55:17 13 Q. So -- and I want to -- so let's -- let's talk about
03:55:20 14 that.

03:55:21 15 When -- when manual capture is used, I think this
03:55:26 16 is clear, the user takes the phones, pushes the button, and
03:55:29 17 takes a picture of the check, right? That's manual
03:55:33 18 capture?

03:55:34 19 A. That's right. The human decides when to take the
03:55:36 20 picture, and they push the button.

03:55:38 21 Q. Now, once the picture is taken, there's a series of
03:55:44 22 steps that occurs, true?

03:55:47 23 A. Sure. Yeah, of course.

03:55:52 24 Q. The image is transmitted to some servers, correct?

03:55:58 25 A. At some point after the image is captured, it's sent to

03:56:03 1 a server, sure.

03:56:04 2 Q. And a server is just a centralized computer, right?

03:56:06 3 A. I think it's -- I can't entirely agree with that

03:56:13 4 description.

03:56:14 5 Q. Well, a server is a dedicated or specialized computer

03:56:18 6 processor?

03:56:21 7 A. In some cases, yes.

03:56:23 8 Q. And the -- that image needs to get to the server

03:56:29 9 whether it was captured automatically or whether the user

03:56:34 10 had to push a button, right?

03:56:37 11 A. It has to get to downstream systems in order to be able

03:56:41 12 to deposit, sure.

03:56:42 13 Q. No matter how it was captured, right?

03:56:47 14 A. To make a deposit, yes, sir.

03:56:49 15 Q. Okay. And, to your knowledge, there's not a different

03:56:56 16 server on the bank side for taking these images using

03:57:03 17 manual capture versus using auto capture?

03:57:08 18 A. Are we talking about Wells Fargo?

03:57:10 19 Q. Banking generally, sir.

03:57:13 20 A. I think it depends.

03:57:15 21 Q. Okay. What about Wells Fargo?

03:57:16 22 A. I didn't see any evidence of a separate server for

03:57:23 23 manual capture images or auto capture images, no.

03:57:28 24 Q. And once it gets to the server, however it's gotten in

03:57:32 25 the system, whether it's manual or automatic, the server

03:57:36 1 has to do some things to process the check, right?

03:57:39 2 A. It depends.

03:57:44 3 Q. Well, it has to perform some optical character

03:57:48 4 recognition, doesn't it?

03:57:49 5 A. In some implementations, yes.

03:57:54 6 Q. It has to be able to gather all the information that's

03:58:00 7 on the check and do -- do some things with it, right?

03:58:03 8 A. Can you re -- say that one more time.

03:58:09 9 Q. Well, when the check gets -- when the image of the

03:58:14 10 check gets to a ser -- gets to the server at the bank, that

03:58:19 11 processor, that computer hardware has to do some things to

03:58:27 12 get that check processed into the bank system, true?

03:58:31 13 A. In general, I agree.

03:58:36 14 Q. There has to be -- for example, on the server at the

03:58:40 15 bank, there has to be some image quality analysis, right?

03:58:46 16 A. I think that depends.

03:58:48 17 Q. Well, is it your testimony, sir, that all the image

03:58:52 18 quality analysis happens on the mobile phone or smart

03:58:55 19 device, or does some of it happen at the bank server

03:58:59 20 itself, or do you know?

03:58:59 21 A. That all depends on configuration.

03:59:04 22 Q. It can be the case that image quality analysis is

03:59:09 23 conducted at the bank-side server, true?

03:59:12 24 A. Well, that's the traditional way it was always done

03:59:16 25 before USAA created auto capture.

03:59:17 1 Q. Sir, you just told the jury that you USAA created --
03:59:31 2 was the first to create auto capture?
03:59:34 3 A. That's my belief, yes, sir.
03:59:36 4 Q. Now, sir, isn't it true that before you were hired as
03:59:42 5 an expert in this case for USAA, back in 2017, you wrote a
03:59:51 6 report that contained a statement that someone else was the
03:59:58 7 first to develop a mobile app with auto capture of a check?
04:00:06 8 A. I don't recall that.
04:00:07 9 Q. Can you look, sir --
04:00:13 10 MR. MELSHEIMER: Your Honor, may we approach the
04:00:14 11 witness with some binders?
04:00:16 12 THE COURT: You may.
04:00:24 13 Opposing counsel has these, as well?
04:00:27 14 MS. GLASSER: We do.
04:00:28 15 MR. MELSHEIMER: Yes, Your Honor.
04:00:29 16 THE COURT: All right. Let's proceed.
04:00:30 17 Q. (By Mr. Melsheimer) I'd like you to look at Tab 18,
04:00:35 18 Mr. Calman. And, again, without describing anything about
04:00:37 19 it, do you recognize Tab 18 as a report that you created in
04:00:43 20 October of 2017?
04:00:44 21 A. There are three books. Which book do you mean?
04:00:52 22 Q. It's in the Calman Exhibit Book, Tab 18?
04:00:55 23 A. Okay. Just a moment.
04:01:03 24 Q. Are you there, sir?
04:01:05 25 A. I'm at Tab 18, yes, sir.

04:01:06 1 Q. And do you see that? Again, without saying anything
04:01:09 2 about what it is, would you -- would you -- do you
04:01:13 3 recognize that as a report that you prepared in October of
04:01:15 4 2017, right?
04:01:16 5 A. It is dated October 2017. And it does have the logo
04:01:25 6 from my company, yes, sir.
04:01:26 7 Q. Okay. And that is before you were hired as an expert
04:01:30 8 in this case by USAA, true?
04:01:32 9 A. True.
04:01:35 10 Q. And if you will turn to Page 4, sir. And I just want
04:01:42 11 to publish one -- one-and-a-half lines to the -- to the
04:01:47 12 jury and to you, sir.
04:01:48 13 Didn't -- didn't you --
04:01:52 14 MS. GLASSER: Your Honor, I had a different
04:01:54 15 understanding of the question he was going to ask. May I
04:01:57 16 approach?
04:01:58 17 THE COURT: Put the lines back on the screen,
04:02:00 18 please, so I can see them.
04:02:09 19 No, Ms. Glasser, have a seat.
04:02:10 20 MS. GLASSER: Okay.
04:02:11 21 THE COURT: Ask your question, Mr. Melsheimer.
04:02:15 22 Q. (By Mr. Melsheimer) In -- in -- back in October of
04:02:17 23 2017, sir, didn't you prepare a report that had this
04:02:23 24 statement in it with this language: Principal developer on
04:02:27 25 Merrill Lynch app, comma, first mobile deposit app to

04:02:31 1 automatically take a photo of a check image -- of a check
04:02:35 2 for image check deposit.

04:02:38 3 Did I read that correctly?

04:02:39 4 A. Yes, sir, but this isn't auto capture as we've been
04:02:43 5 discussing it.

04:02:44 6 THE COURT: You can pull that down now.

04:02:58 7 Q. (By Mr. Melsheimer) So let's get back to sort of the
04:03:00 8 life of this check once it's gotten into the bank system.

04:03:04 9 All right?

04:03:04 10 A. Okay.

04:03:05 11 Q. And, again, whether it's gotten into the bank system by
04:03:09 12 manual capture or auto capture, these are what my questions
04:03:15 13 are to you, okay?

04:03:17 14 A. Okay.

04:03:17 15 Q. So the bank's -- the servers -- the checks show up on
04:03:26 16 the servers, and there has to be work done on the bank side
04:03:29 17 of things to process the check, right?

04:03:32 18 A. Oh, sure. Yes, of course.

04:03:34 19 Q. And that work has to be done really no matter how the
04:03:41 20 check has made its way to the bank, right?

04:03:43 21 A. Well, it depends on a lot of things, but stuff has to
04:03:47 22 be done in order to post and clear checks, sure.

04:03:50 23 Q. Right. Posting and clearing a check has to be done
04:03:53 24 whether it's captured manually on a mobile phone, whether
04:03:57 25 it's done with auto capture, one particular way or another

04:04:00 1 of doing that, or whether someone goes to an ATM and puts
04:04:05 2 the check in, or shows up at the bank and -- with the
04:04:09 3 check -- the paper check, right?
04:04:10 4 A. So banks are obligated to process their customers'
04:04:14 5 deposits, absolutely.
04:04:15 6 Q. And that is a -- a clearing -- that's called a clearing
04:04:19 7 process, right?
04:04:19 8 A. Sometimes.
04:04:20 9 Q. And you have to make -- the bank is going to make
04:04:27 10 entries in its systems about the amount of the check and
04:04:32 11 what account it's either going to or from and things of
04:04:36 12 that nature. That's what's called clearing, right?
04:04:38 13 A. That's not exactly right.
04:04:39 14 Q. All right. Let me say it a different way.
04:04:41 15 A. Uh-huh.
04:04:42 16 Q. The process of clearing a check involves typically --
04:04:47 17 or can involve more than one bank, right?
04:04:49 18 A. Oh, if you're talking about clearing, it always
04:04:54 19 involves another bank.
04:04:54 20 Q. Because in clearing, you might have a check written
04:04:58 21 from -- let's just take an example of me to you. Let's say
04:05:01 22 I write you a check, and I use Wells Fargo or Chase. And
04:05:05 23 let's say your -- your account is Bank of America, okay?
04:05:12 24 If I write you a check and you want it deposited in your
04:05:16 25 Bank of America account, no matter how you're going to

04:05:18 1 deposit it --
04:05:18 2 A. Uh-huh.
04:05:19 3 Q. -- okay, that check has to go through certain processes
04:05:24 4 at both my bank, right, and at your bank?
04:05:30 5 A. Well, would be in the other order. It would be at my
04:05:34 6 bank, and then it would be at your bank. But that's sort
04:05:37 7 of right.
04:05:38 8 Q. You would deposit it at your bank. It would have to go
04:05:41 9 through the process. There had to be -- make sure I have
04:05:43 10 money in my account to satisfy whatever check I've written
04:05:46 11 to you, right?
04:05:46 12 A. Well, that wouldn't happen at my bank.
04:05:46 13 Q. Well, but you --
04:05:48 14 A. That would happen at your bank.
04:05:49 15 Q. Sir, we're talking about the process. The process is a
04:05:52 16 back-and-forth between those two banks, right?
04:05:54 17 A. I wouldn't characterize it as back and forth, no, sir.
04:05:59 18 Q. Would you characterize it as a process that involves
04:06:02 19 two banks?
04:06:04 20 A. Yes, I think I said that for sure.
04:06:06 21 Q. And the check clearing process is something that's been
04:06:09 22 known for decades, right?
04:06:12 23 A. Oh, most definitely.
04:06:15 24 Q. And, again, you have to clear checks no matter how they
04:06:18 25 get in the system, fair? Or process checks no matter how

04:06:22 1 they get in the system, right?

04:06:23 2 A. Yeah, like I said, banks are obligated to process their
04:06:26 3 customers' deposits.

04:06:28 4 Q. Because they may not clear?

04:06:29 5 A. That's definitely true.

04:06:32 6 Q. Right, you might have a check where the person writes a
04:06:35 7 check, but they don't have enough in their account to cover
04:06:38 8 the check that you've deposited.

04:06:39 9 And then there will be some communication back
04:06:41 10 to -- if I've written that check, I'll find out from my
04:06:45 11 bank, hey, we can't honor this. And you'll find out from
04:06:48 12 your bank that, hey, we can't credit you because this
04:06:52 13 person doesn't have the money.

04:06:53 14 A. It's a really complex system, that's right.

04:06:56 15 Q. All right, sir. So let me talk about checks generally.
04:07:10 16 And let's -- let's go to your report, and I think you have
04:07:13 17 it there in your binder, sir, Section -- do you have your
04:07:19 18 report, sir?

04:07:19 19 A. Yes, sir.

04:07:21 20 Q. Okay. Can you go to Paragraph 18A -- or Section 18A of
04:07:28 21 your report?

04:07:35 22 A. Numeral 18A, yes, sir, I'm there.

04:07:38 23 Q. And that's titled, I believe, The Importance of Mobile
04:07:41 24 Deposit to Wells Fargo?

04:07:41 25 A. It is.

04:07:42 1 Q. Okay. And you say: Having an effective mobile deposit
04:07:46 2 system is critical -- is of critical importance for Wells
04:07:52 3 Fargo in a competitive banking market, right?
04:07:54 4 A. Yes, sir.
04:07:55 5 Q. Okay. Now, you don't say auto capture in that
04:07:57 6 sentence, do you, sir?
04:07:58 7 A. No, I say an effective mobile deposit system.
04:08:02 8 Q. Because mobile deposit system involves things other
04:08:07 9 than auto capture, true?
04:08:08 10 A. An effective mobile deposit system does include auto
04:08:16 11 capture.
04:08:16 12 Q. But it also involves other things, doesn't it, sir?
04:08:19 13 A. Oh, yeah, that's the other 60 percent.
04:08:21 14 Q. And you know that Wells Fargo previously had a mobile
04:08:26 15 deposit system that did not have auto capture, right?
04:08:28 16 A. Definitely.
04:08:29 17 Q. Now, one of the things that we -- that -- were you here
04:08:37 18 for the opening statement?
04:08:38 19 A. The majority, yes, sir.
04:08:41 20 Q. So one of the things that was discussed in the opening
04:08:44 21 was whether or not checks -- paper checks have the same
04:08:48 22 importance as they used to, right?
04:08:51 23 A. I heard that mentioned, yes, sir.
04:08:53 24 Q. And you agree -- and -- you agree that checks have been
04:09:02 25 of declining importance over the years, fair?

04:09:05 1 A. No, I don't agree with that statement.

04:09:06 2 Q. Well, sir, haven't you previously testified under oath

04:09:11 3 that -- that checks are a dying channel?

04:09:16 4 A. I don't recall that testimony.

04:09:18 5 Q. Okay. Well, let's take a look at it, sir.

04:09:25 6 Take a look at your prior testimony binder, sir,

04:09:41 7 Tab 1.

04:09:45 8 A. Yes, sir.

04:09:47 9 Q. And if you would, sir, go to Page 131.

04:09:51 10 A. Okay.

04:09:52 11 Q. Tell me when you're there, sir.

04:10:04 12 A. I'm at Page 131.

04:10:05 13 Q. And if you look, sir, at the -- the -- the

04:10:19 14 answer starting on Line 4, you talk about the payments

04:10:25 15 leadership council at the bank looks at payments in

04:10:29 16 general, which is really focused, again, on card and ACH.

04:10:34 17 Do you see that?

04:10:34 18 A. I do.

04:10:35 19 Q. And you say: Check is a, you know, declining, dying

04:10:42 20 product, or dying channel. Did I read that correctly, sir?

04:10:45 21 A. That's the testimony as it appears.

04:10:47 22 Q. And you said that back in 2007, right?

04:10:52 23 A. That was the point of view, yes, sir.

04:10:54 24 Q. Now, there were some projections made at Wells Fargo

04:11:08 25 about how successful mobile deposit would be when they

04:11:14 1 first implemented that product using the Mitek software,
04:11:17 2 fair?

04:11:21 3 A. I wouldn't quite agree with that the way you said that,
04:11:24 4 but you're close.

04:11:24 5 Q. Well, did you talk about some projections, sir, in your
04:11:30 6 report in Paragraph 514?

04:11:36 7 A. I did talk about projections prior to the launch, yes,
04:11:39 8 sir.

04:11:39 9 Q. Can you look at your report, sir, and Paragraph 514?

04:11:48 10 A. 514. Oh, I'm sorry, Paragraph 514.

04:11:57 11 Q. Paragraph 514, sir, I apologize.

04:12:01 12 A. I was looking at page. I'm there.

04:12:18 13 Q. And here, I'm going to illustrate -- display for the
04:12:22 14 jury, if we would, the chart on Paragraph 514, sir. This
04:12:28 15 is a -- this is a Wells Fargo document or Wells Fargo data
04:12:34 16 that shows both the actual mobile deposits versus forecast.

04:12:40 17 Are you with me?

04:12:40 18 A. Yes, sir.

04:12:41 19 Q. Okay. So let's just take a look at what is shown in
04:12:44 20 here. Now, this is -- this is data that actually goes up
04:12:53 21 to 2018, does it not, sir?

04:12:54 22 A. Yes, sir.

04:12:59 23 Q. And if you start -- and just to orient the jury,
04:13:02 24 there's different colors of the lines. There was -- the
04:13:08 25 green is the forecast for the high side, the red is the

04:13:11 1 forecast for the median, and the purple is the forecast for
04:13:15 2 the low, and then the actual is the yellow. Is that right?
04:13:20 3 A. You got it right.
04:13:22 4 Q. So it looks like to me, sir, that the actual mobile
04:13:29 5 deposits that were -- that were experienced at Wells Fargo
04:13:37 6 Bank quite exceeded the projections that they made back in
04:13:39 7 2012, right?
04:13:40 8 A. Yes, indeed.
04:13:41 9 Q. You know that it starts in 2012, this chart, because
04:13:47 10 that's when Wells Fargo started offering mobile -- the
04:13:52 11 mobile deposit app for people's smartphones, right?
04:13:57 12 A. Well, that was the first year of the data table, and it
04:14:01 13 was also the year that they launched mobile deposit, that's
04:14:05 14 right.
04:14:05 15 Q. No doubt -- I just -- just so we're clear, you're not
04:14:09 16 doubting that 2012 was the date that Wells Fargo launched
04:14:13 17 its mobile deposit app, are you, sir?
04:14:15 18 A. No.
04:14:17 19 Q. Okay. And it looks like that for the year 2012, it's
04:14:25 20 not going straight up, but it's going up at about a
04:14:32 21 45-degree angle, would you say, maybe even a 60-degree
04:14:36 22 angle?
04:14:37 23 A. Well, sir, this is annual full year data. So you can't
04:14:40 24 use the angle or the -- any of the intermediate points.
04:14:45 25 You can only use the -- if you zoom back out you'll see the

04:14:48 1 data table. You can only use those full year figures. So
04:14:52 2 I can't agree with your interpretation.

04:14:53 3 Q. Well, sir, let's look at what's happening with the
04:14:56 4 line, though. The line starts in 2012, and it's going up,
04:15:01 5 true?

04:15:01 6 A. Again, it's -- it would be incorrect to interpret this
04:15:09 7 chart the way you are.

04:15:10 8 Q. You don't think that mobile deposits were going up at
04:15:17 9 Wells Fargo in 2012?

04:15:19 10 A. That's not what I'm saying, sir.

04:15:21 11 Q. Okay. So let me see if I can -- let's see if you --
04:15:24 12 let's see if you and I can communicate better on this.

04:15:27 13 This chart goes from 2012 to 2018, right?

04:15:32 14 A. It contains annual values for each of those years, yes,
04:15:36 15 sir.

04:15:36 16 Q. And it looks like from 2012 to 2013, there's a pretty
04:15:45 17 significant increase in mobile deposits?

04:15:48 18 A. As I said, if you show the table along with the chart,
04:15:51 19 as it's depicted in Paragraph 514, you can see that's true
04:15:54 20 for all four lines, yes.

04:15:58 21 MR. MELSHEIMER: Let's back it up.

04:16:00 22 Q. (By Mr. Melsheimer) Is this what you want to look at,
04:16:08 23 sir?

04:16:08 24 A. This is the data upon which that chart is built, yes,
04:16:11 25 sir.

04:16:11 1 Q. And just so we're clear, this data is plotted, if you
04:16:17 2 will, the data on the right is represented by the graphs on
04:16:23 3 the left, isn't that what's shown here, sir?
04:16:26 4 A. Absolutely correct.
04:16:27 5 Q. Okay. And it shows that in 2012 the actual mobile
04:16:36 6 deposits were 1.6 million deposits, is that -- am I reading
04:16:41 7 that correctly?
04:16:41 8 A. For the full year of 2012, it was 1,601,251, that's
04:16:49 9 right.
04:16:49 10 Q. To be clear, and to be fair with you, sir, did -- we're
04:16:51 11 not saying that Wells Fargo even had the app for the
04:16:53 12 entirety of 2012, or do you know?
04:16:55 13 A. It was not -- no, they did not have the app released to
04:17:00 14 the public for the full year of 2012, that's right.
04:17:03 15 Q. So you said the full year, but it really measures --
04:17:09 16 whatever part of the year the app was available in 2012,
04:17:13 17 right?
04:17:13 18 A. That's the total number of actual mobile deposits in
04:17:15 19 the year 2012.
04:17:20 20 Q. And it's dramatically increased from 2012 to 2013, is
04:17:26 21 it not, sir?
04:17:27 22 A. Well, for the full year of 2012, yes, as compared to
04:17:30 23 the full year of 2013, you bet.
04:17:32 24 Q. And we know that in 2012, there was manual capture,
04:17:39 25 right?

04:17:39 1 A. That's right.

04:17:39 2 Q. We know in 2013, there was manual capture, correct?

04:17:44 3 A. There was manual capture in every year of this chart.

04:17:46 4 Q. Sir, in 2012 and 2013, there was only manual capture in

04:17:54 5 the Wells Fargo app, you know that, don't you?

04:17:56 6 A. I do.

04:17:57 7 Q. You know that it was only in May or so of 2014 that

04:18:08 8 Wells Fargo added the MiSnap feature to its mobile app,

04:18:14 9 correct?

04:18:14 10 A. Yes, sir.

04:18:18 11 Q. And, again, we can look at the data on the left -- or,

04:18:24 12 excuse me, on the right, and we can look on the chart on

04:18:27 13 the left and see what's happening with the actual mobile

04:18:32 14 deposits and then the projections, true?

04:18:34 15 A. That's right. You can see that after auto capture was

04:18:39 16 launched, that gap just got bigger and bigger and bigger.

04:18:45 17 MR. MELSHEIMER: Objection, nonresponsive, Your

04:18:47 18 Honor. Move to strike.

04:18:50 19 THE COURT: Overruled.

04:18:51 20 Q. (By Mr. Melsheimer) What I -- what I see, sir, and I

04:18:56 21 agree with what you said about the increase, but can we

04:18:58 22 agree that between 2012 and 2013, there was about 16

04:19:08 23 million more mobile deposits year over year just using

04:19:15 24 manual capture, true?

04:19:16 25 A. Well, as you pointed out, 2012 wasn't a full year. So

04:19:19 1 you really can't compare 2012 to 2013, as though it was a
04:19:24 2 year over year increase because you don't have a full year
04:19:27 3 in 2012.

04:19:27 4 Q. Well, we can't do that for 2014 either, can we, sir?

04:19:30 5 A. It's apples and oranges. I'm not sure I understand.

04:19:36 6 Q. Sir, mobile deposit with auto capture wasn't offered
04:19:43 7 for the whole year of 2014 either, was it, sir?

04:19:46 8 A. No, that's true.

04:19:48 9 Q. Okay. And, in fact, sir, can you agree with me that
04:19:58 10 the -- the -- what Wells Fargo experienced with manual
04:20:02 11 capture in 2013 was numbers that -- that it wasn't
04:20:13 12 projected to hit in the median or low forecast until 2017
04:20:19 13 or 2018, right?

04:20:24 14 A. Yeah, the actual exceeded the high forecast by 26
04:20:29 15 percent, and that low forecast was just a half of the high
04:20:33 16 forecast, so it was even, you're right, later before that
04:20:37 17 low forecast would catch up.

04:20:40 18 Q. Let's be clear, sir. The actual numbers of mobile
04:20:42 19 deposit in 2013 were 17 million, right?

04:20:45 20 A. 17 --

04:20:45 21 Q. 17.6 million, true?

04:20:48 22 A. Yes, sir.

04:20:48 23 Q. And that wasn't forecasted under the median forecast
04:20:56 24 until 2017, that that kind of number, was it, sir?

04:21:01 25 A. I can't disagree. That's what the chart shows.

04:21:13 1 Q. I want to talk to you about your Net Promoter Score,
04:21:26 2 sir. You do a model called Net Promoter Score, and you
04:21:30 3 said that's all based on this notion of would you recommend
04:21:33 4 the services of this company to a friend.
04:21:36 5 A. Okay. So, A, it's not my Net Promoter Score.
04:21:40 6 Q. It's your analysis?
04:21:41 7 A. And, B, it's not my notion. This is a well-accepted
04:21:45 8 industry model that's adopted by many companies around the
04:21:49 9 world.
04:21:49 10 Q. I'm not criticizing it at all, sir. I want -- it's --
04:21:53 11 it's in your report, right?
04:21:54 12 A. Oh, yes, sir, Net Promoter System is in my report.
04:21:57 13 Q. It's what -- it's a model that you, Matt Calman, adopt
04:22:02 14 and write about in your report, true?
04:22:04 15 A. I wouldn't quite say it that way.
04:22:08 16 Q. Is Net Promoter Score analysis contained within the
04:22:12 17 expert report of Matt Calman or is it not?
04:22:14 18 A. I do reference insights from Bain's NPS system, for
04:22:21 19 sure.
04:22:21 20 Q. And that is called Net Promoter, isn't it, sir?
04:22:24 21 A. The system -- right. "S" can mean system or score.
04:22:27 22 But NPS is Bain's model, and I did adopt insights from that
04:22:33 23 model, you bet.
04:22:34 24 Q. And your model depends in part on Wells Fargo being a
04:22:41 25 leader in mobile banking, right?

04:22:42 1 A. Yes.

04:22:48 2 Q. But mobile banking is more than just mobile deposit,

04:22:51 3 right?

04:22:51 4 A. Well, they were a leader in both.

04:22:56 5 Q. Mobile banking is more than mobile deposit; isn't that

04:23:03 6 right, sir?

04:23:03 7 A. Of course.

04:23:04 8 Q. Mobile banking involves things like checking your

04:23:09 9 account balance, right?

04:23:11 10 A. Yes.

04:23:11 11 Q. Transferring money between accounts, right?

04:23:14 12 A. Yes.

04:23:14 13 Q. Paying bills, right?

04:23:17 14 A. In some, yes.

04:23:20 15 Q. None of those services involve depositing checks, do

04:23:24 16 they, sir?

04:23:25 17 A. Not directly, no.

04:23:27 18 Q. Now, sir, I want to take a look at something that you

04:23:38 19 cite in your report called The Mobile 2015 Roadmap. This

04:23:48 20 is a Document 419, and I believe it's in your exhibit

04:23:51 21 binder, sir, at Tab 7.

04:23:54 22 A. Just a second, please. Okay. The --

04:24:03 23 Q. I'm sorry, sir?

04:24:05 24 A. I apologize.

04:24:05 25 Q. Tab -- Tab 7 --

04:24:07 1 A. Of --

04:24:08 2 Q. -- in the binder. It's a Wells Fargo document entitled

04:24:11 3 Mobile 2015 Roadmap.

04:24:13 4 A. This is the Calman exhibits binder?

04:24:17 5 Q. Yes, sir.

04:24:18 6 A. And tab number?

04:24:20 7 Q. Tab No. 7.

04:24:25 8 A. I'm there.

04:24:25 9 Q. If you need to confirm, sir, it's referenced in your

04:24:30 10 report at Paragraph 496, but you -- do you remember looking

04:24:33 11 at this?

04:24:34 12 A. Okay. I'm at Paragraph 496, and I have PX-419; is that

04:24:58 13 correct?

04:24:58 14 Q. Yes, sir.

04:24:59 15 A. Okay.

04:24:59 16 Q. So this is a -- a roadmap that Wells Fargo prepared for

04:25:04 17 its mobile banking operations, right?

04:25:06 18 A. Oh, sorry, 496. Here we go, okay. Yeah, I'm there.

04:25:18 19 Q. We're all looking at it. Okay. It's a mobile roadmap

04:25:22 20 as of 2015; isn't that right, sir?

04:25:24 21 A. Yes, sir.

04:25:24 22 Q. These are common -- you saw these kind of things when

04:25:29 23 you worked for Bank of America, didn't you?

04:25:30 24 A. Saw them and created them, you bet.

04:25:32 25 Q. These are sort of looking -- forward-looking documents

04:25:37 1 about plans and -- and assessments of how the company is
04:25:40 2 doing in particular areas?

04:25:42 3 A. They're internal use only. Like I said earlier,
04:25:47 4 they're -- they talk about features that may or may not be
04:25:50 5 coming in the future.

04:25:51 6 Q. And there's often discussion about how we can get
04:25:54 7 better, what can we do differently, what's working, things
04:25:58 8 of that nature, right?

04:25:59 9 A. You bet.

04:26:00 10 Q. And the first substantive page of the document talks
04:26:08 11 about the mobile channel, right?

04:26:11 12 A. Talking about Page 1? Yeah.

04:26:13 13 Q. And I'm also displaying it, sir.

04:26:17 14 A. Uh-huh.

04:26:17 15 Q. And this talks about the mobile channel where it's got
04:26:20 16 the mobile website, which is wellsfargo.com, the mobile
04:26:26 17 app, the text banking, and then even tablet applications.

04:26:32 18 Do you see that?

04:26:32 19 A. I do.

04:26:33 20 Q. And those are all items of mobile banking that are not
04:26:38 21 specifically related to auto capture, correct, sir?

04:26:41 22 A. I agree. Oh, well, if I may, auto capture is included
04:26:50 23 in some of those.

04:26:51 24 Q. Understood. So I'm looking at a slide. If you want to
04:27:00 25 look on Page 4, you can look in the -- in the -- in your

04:27:04 1 binder, the 2014/2015 Focus for Retail Mobile. Do you see
04:27:09 2 that?

04:27:09 3 A. I see it.

04:27:10 4 Q. Now, retail banking, that's what we mean -- people
04:27:17 5 just -- ordinary people banking, as opposed to business
04:27:21 6 banking, right? That's retail banking?

04:27:22 7 A. I disagree.

04:27:23 8 Q. So you think retail banking also includes business
04:27:26 9 banking?

04:27:26 10 A. It does.

04:27:27 11 Q. Okay. So retail banking can include business banking
04:27:31 12 or consumer banking?

04:27:35 13 A. Yes.

04:27:36 14 Q. Well, I -- I mean, I want to get it straight from you,
04:27:39 15 sir. Is -- is retail banking -- is that both consumer and
04:27:42 16 businesses?

04:27:43 17 A. Yes, it is.

04:27:45 18 Q. Okay. What do we refer to when we're just talking
04:27:50 19 about non-business banking, i.e., just individual
04:27:53 20 consumers? What's that called?

04:27:55 21 A. When we're just -- can you rephrase?

04:27:58 22 Q. What do we call it when we're just talking about
04:28:02 23 non-business customers, sir?

04:28:03 24 A. I guess it depends.

04:28:09 25 Q. Depends on what?

04:28:11 1 A. So in my experience at Bank of America, consumer
04:28:14 2 banking was both individuals, like you and me, and what
04:28:19 3 were called small business and what was called small and
04:28:22 4 medium enterprise.

04:28:25 5 But at Bank of America, small business is any
04:28:27 6 business that makes less than \$500 million a year. So to
04:28:32 7 some people, that's not really small business, that's real
04:28:34 8 business.

04:28:35 9 Q. Retail includes all of that at Wells Fargo, as far as
04:28:41 10 you know, right?

04:28:42 11 A. Well, I don't know exactly how Wells Fargo makes
04:28:45 12 their -- their market segmentation, as it's called.

04:28:47 13 Q. Well, let's take a look at some of the things that are
04:28:50 14 discussed in this roadmap, sir.

04:28:55 15 There's a mobile My Spending. Do you see that?

04:28:59 16 A. I do.

04:28:59 17 Q. That's introducing PFM functionality to the mobile
04:29:03 18 experience by providing customers the ability to view their
04:29:06 19 spending in graphical form. Do you see that?

04:29:08 20 A. Yeah. PFM is short for personal financial management.

04:29:12 21 Q. That doesn't have anything to do with the auto capture
04:29:15 22 as described in these patents, does it, sir?

04:29:17 23 A. No.

04:29:19 24 Q. Something called Mobile IRT. Do you see that, sir?
04:29:31 25 Mobile IRT is institutional retirement and trust

04:29:35 1 experience. Do you see that?

04:29:37 2 A. Yes, sir.

04:29:37 3 Q. Is that like investments?

04:29:39 4 A. I think it includes investments.

04:29:41 5 Q. And that doesn't have anything to do with auto capture

04:29:43 6 as described in these patents, does it, sir?

04:29:45 7 A. I wouldn't agree with that necessarily.

04:29:50 8 Q. Well, is there anything on this slide that references

04:29:53 9 any form of auto capture or mobile deposit?

04:29:55 10 A. I know at Bank of America, the Merrill Lynch app did

04:30:01 11 include mobile deposit. So I don't know if Wells Fargo did

04:30:04 12 that, too, or not.

04:30:05 13 Q. Sir, my question was: Do you see anything on this

04:30:07 14 slide that rep -- that references mobile deposit or the

04:30:12 15 USAA form of auto capture?

04:30:13 16 A. There are some icons at the bottom of the screen. I

04:30:21 17 don't know what those do. Well, it says: The benefit is

04:30:28 18 to provide access to top features desired for mobile

04:30:32 19 access. So I can't really tell.

04:30:34 20 Q. Do you see the words "mobile deposit" or "auto capture"

04:30:38 21 on this slide, sir?

04:30:39 22 A. Let me keep reading. I don't see the words "auto

04:30:53 23 capture," but in two places, I see this notion of top

04:30:56 24 features desired for mobile access, and I just know how

04:31:00 25 much customers love mobile deposit.

04:31:02 1 Q. Rewards Mobile Optimization. Do you see that, sir, on
04:31:08 2 Page 7?

04:31:08 3 A. I do.

04:31:09 4 Q. Nothing about mobile deposit or auto capture here, is
04:31:12 5 there, sir?

04:31:13 6 A. It's hard to read all the links, but I -- I don't see
04:31:29 7 it. And there's some icons -- again, on this screenshot on
04:31:32 8 the right, it's really hard to see at the bottom, so I
04:31:35 9 can't be sure. But, you're right, I don't see the words
04:31:38 10 "mobile deposit" or "auto capture" on here.

04:31:39 11 Q. Well, isn't this talking about, sir, this idea of
04:31:43 12 having reward points and dealing with that in some way?

04:31:48 13 A. Maybe you get rewards for doing mobile deposits.

04:31:52 14 Q. You don't see that on the slide, do you, sir?

04:31:55 15 A. Not specifically.

04:32:02 16 Q. Travel Notifications?

04:32:06 17 A. I'll just mention we did look at that kind of thing
04:32:09 18 when I was at Bank of America.

04:32:14 19 I'm sorry, the next page?

04:32:14 20 MR. MELSHEIMER: I'm going to object to the answer
04:32:18 21 of, he looked at that kind of thing at Bank of America, as
04:32:21 22 nonresponsive, Your Honor.

04:32:21 23 THE COURT: I'll sustain that.

04:32:23 24 Q. (By Mr. Melsheimer) Travel Notifications, sir, you can
04:32:24 25 get -- enables customers to leverage mobile and online

04:32:27 1 channel to inform Wells Fargo about their travel plans.
04:32:31 2 This will help customers avoid issues using their cards
04:32:35 3 while traveling.

04:32:36 4 Do you see that?

04:32:36 5 A. I see that, yeah.

04:32:38 6 Q. And we can go through, and we won't, but there's any
04:32:41 7 number of other things in this roadmap that are other
04:32:44 8 aspects of mobile banking, true?

04:32:47 9 A. Oh, definitely.

04:32:51 10 Q. Some of these are things that the bank is going to
04:32:54 11 implement. Some of them are things the bank has
04:32:57 12 implemented. And some of them are things the bank is
04:33:00 13 simply thinking about implementing, right?

04:33:03 14 A. It all just depends.

04:33:31 15 Q. Now, you were still at -- at -- you were still at Bank
04:33:35 16 of America in 2009, right?

04:33:36 17 A. 2009, definitely.

04:33:38 18 Q. And when did Bank of America start offering mobile
04:33:44 19 deposit with manual capture?

04:33:49 20 A. It was three years after USAA. It was in 2012.

04:33:53 21 Q. So is it fair -- was Bank of America the biggest bank
04:33:58 22 at that time in the country, sir?

04:34:00 23 THE COURT: Counsel, approach the bench, please.

04:34:03 24 (Bench conference.)

04:34:09 25 THE COURT: There's an order in limine that

04:34:12 1 prohibits talking about size of banks, and you've referred
04:34:15 2 to Bank of America twice as the biggest bank in America.
04:34:18 3 You're going to open a door I'm going to let the Plaintiffs
04:34:22 4 go through with regard to your client,
04:34:24 5 Mr. Melsheimer.

04:34:25 6 MR. MELSHEIMER: I'll withdraw that.

04:34:26 7 THE COURT: And I want to know why we're talking
04:34:28 8 about Bank of America.

04:34:29 9 MR. MELSHEIMER: Just because there was a
04:34:30 10 suggestion that you couldn't do manual capture --

04:34:32 11 THE COURT: I want to hear about Wells Fargo, not
04:34:34 12 Bank of America.

04:34:34 13 MR. MELSHEIMER: Thank you, Your Honor.

04:34:35 14 MR. SHEASBY: Thank you, Your Honor.

04:34:36 15 (Bench conference concluded.)

04:34:40 16 THE COURT: Let's proceed.

04:34:41 17 MR. MELSHEIMER: Thank you, Your Honor.

04:34:42 18 Q. (By Mr. Melsheimer) You were shown some pictures of
04:34:58 19 the Wells Fargo app as compared to the USAA app, in your
04:35:01 20 direct examination, sir. Do you remember that?

04:35:04 21 A. Left and right, yes, sir.

04:35:06 22 Q. Yes, sir. And you understand that those pictures
04:35:11 23 aren't relevant to the issue of patent infringement in this
04:35:14 24 case, right?

04:35:16 25 A. Okay. Can you explain?

04:35:19 1 Q. Well, do you understand that the patents in this case
04:35:24 2 do not involve the -- how one program looks versus how
04:35:29 3 another program looks? Do you understand that or not?
04:35:33 4 A. Oh, well, the patents are not about the aesthetics.
04:35:37 5 They're about how the program -- how the system works.
04:35:39 6 Q. How the code inside the smartphone operates, right?
04:35:42 7 A. And the user experience that it creates.
04:35:45 8 Q. Which could be auto capture or manual capture, as we've
04:35:50 9 been discussing, right?
04:35:51 10 A. Well, the patents are all about auto capture.
04:35:53 11 Q. Well, they are, sir. Thank you for pointing that out.
04:35:56 12 And I'll add -- strike that.
04:35:57 13 You understand that the Wells Fargo application
04:36:01 14 here still do manual capture, correct?
04:36:05 15 A. Today, yes, that's correct.
04:36:19 16 MR. MELSHEIMER: May I have one moment, Your
04:36:21 17 Honor?
04:36:21 18 THE COURT: You may.
04:36:54 19 MR. MELSHEIMER: Apologize, Your Honor.
04:37:17 20 Q. (By Mr. Melsheimer) Can you look at Tab 8 of your
04:37:19 21 exhibit binder, sir?
04:37:20 22 A. I'm there.
04:37:25 23 Q. And this is a -- something called the Futurion Report,
04:37:34 24 correct? It's been referred to as that?
04:37:36 25 A. Yeah, I pointed out before, this is PX-No. 5.

04:37:39 1 Q. PX-5, and it's called 2007 [sic] Mobile Deposit
04:37:44 2 Benchmark Report, Consumer Behavioral and Attitudinal
04:37:48 3 Research; do you see that?
04:37:48 4 A. That's not correct, sir.
04:37:49 5 Q. Consumer Behavioral and Attitudinal Research, it
04:37:56 6 doesn't say that?
04:37:56 7 A. That part's correct.
04:37:58 8 THE COURT: You said 2007, Mr. Melsheimer.
04:38:00 9 Q. (By Mr. Melsheimer) 2017, I'm sorry, Mr. Calman. 2017
04:38:05 10 Mobile Deposit Benchmark Report, correct?
04:38:07 11 A. Yes, sir.
04:38:08 12 Q. Consumer Experience Rankings for the Top 15 Financial
04:38:12 13 Institutions; do you see that?
04:38:12 14 A. Yes, indeed.
04:38:22 15 Q. And what this report does, as I understand your
04:38:24 16 testimony and in reading it, it ranks 15 different banks'
04:38:29 17 mobile apps, right?
04:38:30 18 A. This is a benchmark, yes.
04:38:32 19 Q. And from 1 to 15, right?
04:38:36 20 A. I don't recall if there was -- no, that's right. Yes,
04:38:41 21 it was -- it was a ranking, that's right.
04:38:43 22 Q. 1 is the best, right?
04:38:45 23 A. 1 is the top rated, in this report, you bet.
04:38:49 24 Q. 15 is the lowest rated, right?
04:38:51 25 A. Yes, sir.

04:38:52 1 Q. So let's take a look at the different rankings here.

04:39:06 2 So -- and maybe let's make it easy, sir, by looking at

04:39:25 3 Page 21. Do you see that? Is that the rankings of the

04:39:37 4 various banks in the survey?

04:39:38 5 A. It's titled Detailed Financial Institution Findings.

04:39:42 6 Q. And Wells Fargo is ranked second?

04:39:44 7 A. No. 2.

04:39:44 8 Q. Okay. And BB&T is ranked last, right?

04:39:52 9 A. Yes, indeed.

04:39:53 10 Q. Now, Regions Bank is almost last, they're second to

04:39:57 11 last, right?

04:39:57 12 A. They are.

04:39:58 13 Q. And you know they have auto capture, right?

04:40:00 14 A. You can tell that by they have a green box in the

04:40:04 15 second to the last column with the auto capture function.

04:40:06 16 Q. So you've got a bank near the bottom of the list,

04:40:10 17 Regions, that has auto capture, right, and you've got a

04:40:12 18 bank at No. 2, Wells Fargo, that also has auto capture,

04:40:16 19 right?

04:40:16 20 A. That is correct.

04:40:18 21 Q. Now, if you look at Page 48 of the report, sir, doesn't

04:40:35 22 it talk about the need to maintain manual capture?

04:40:40 23 A. Would you like me to read the whole page, or is there a

04:40:45 24 place you want me to look?

04:40:47 25 Q. Yeah, I'm going to just direct you to Page 48, and I'm

04:40:51 1 going to see if I can find that and display it for the
04:40:54 2 jury's benefit.

04:41:05 3 MR. MELSHEIMER: Mr. Barnes, can you pull up
04:41:07 4 Page 48?

04:41:11 5 Q. (By Mr. Melsheimer) Can you see about in the middle of
04:41:31 6 the page, it's talking about --

04:41:33 7 MR. MELSHEIMER: Let's actually go to Page 47
04:41:35 8 first so we can see what this is.

04:41:38 9 Q. (By Mr. Melsheimer) So this is a series of --

04:41:39 10 MR. MELSHEIMER: Let's back up one more, if we
04:41:42 11 could.

04:41:44 12 Q. (By Mr. Melsheimer) This is something called
04:41:46 13 Definitions, Heuristics. What's that, sir?

04:41:50 14 A. Oh, this describes those different boxes we saw in the
04:41:54 15 chart.

04:41:54 16 Q. Efficiency of use, clear terminology, match user
04:41:58 17 expectations, things like that?

04:42:01 18 A. These are the categories that Futurion used in their
04:42:05 19 surveys, in their rankings we looked at.

04:42:08 20 MR. MELSHEIMER: And if we go to Page 47.

04:42:12 21 Q. (By Mr. Melsheimer) Consistency and Standards,
04:42:12 22 Hierarchy and Context -- used to take that consistency,
04:42:16 23 sir. It says: Users should not have to wonder whether
04:42:20 24 different words, situations, or actions mean the same
04:42:23 25 thing. Follow platform conventions, right?

04:42:25 1 A. Yeah, you want to -- everywhere you see the same word
04:42:29 2 you want it to mean the same thing or work the same way.
04:42:31 3 Q. Because that's going to enhance the overall user
04:42:35 4 satisfaction with the particular application, right?
04:42:37 5 A. It definitely makes the application less difficult to
04:42:41 6 learn and clearer and more understandable.
04:42:43 7 Q. So if a -- if a screen says, you know, push the button,
04:42:46 8 you ought to push the button as opposed to doing something
04:42:49 9 else, right?
04:42:49 10 A. I don't agree with that example, but...
04:42:52 11 Q. Well, users should not have to wonder whether different
04:42:56 12 words, situations, or actions mean the same thing. Meaning
04:43:00 13 you ought to make it clear to people how the thing works,
04:43:03 14 right?
04:43:03 15 A. Yes, or else they're going to have a hard time learning
04:43:07 16 how to use the app. If a word means something different on
04:43:10 17 different pages or different activities, that's very
04:43:14 18 confusing.
04:43:14 19 Q. Exactly. So let's go to Page 48.
04:43:17 20 A. Uh-huh.
04:43:17 21 Q. And 48 --
04:43:19 22 MR. MELSHEIMER: Sorry, back to 47 real quick, to
04:43:23 23 the bottom of the page.
04:43:24 24 Q. (By Mr. Melsheimer) Hierarchy and Context. The
04:43:27 25 hierarchy and context should easily funnel the user through

04:43:31 1 their actions in order to reach their desired goal with no
04:43:34 2 confusion, right?

04:43:34 3 A. You don't want users to get lost.

04:43:37 4 Q. So, for example, the first one is: User must be told
04:43:39 5 the daily cutoff time for deposits first, clearly displayed
04:43:43 6 at the beginning of the process, right?

04:43:44 7 A. Well, this was the criteria that Futurion applied when
04:43:47 8 they did their ratings, that's right.

04:43:48 9 Q. But they were looking to see whether the applications
04:43:52 10 had these features, right?

04:43:53 11 A. I think that's right.

04:43:56 12 Q. That was one of the things they were grading them on,
04:44:00 13 on, hey, is it clear to the user when the cutoff time is to
04:44:05 14 make a deposit?

04:44:05 15 A. Well, yes and no.

04:44:12 16 Q. Let's go to the second one.

04:44:16 17 The help option must be easy to identify. So
04:44:19 18 that's -- we've all had that situation, right, sir? You're
04:44:22 19 in a program and you want some help on how to use it. And
04:44:26 20 the point is, hey, we're going to grade y'all on whether or
04:44:28 21 not your -- your -- your application makes the help
04:44:33 22 option easy to identify, right?

04:44:34 23 A. So the grading was at a higher level. I think these
04:44:39 24 are examples of what they were looking for, but I follow
04:44:42 25 with what you're saying.

04:44:43 1 Q. Users should be able to choose the account to which
04:44:47 2 they will deposit before entering the dollar amount.
04:44:52 3 That's another thing they were looking at, right?
04:44:54 4 A. Yeah, I don't really agree with that philosophy, but
04:44:56 5 that is what they were grading on.
04:44:58 6 Q. This is the Futurion document's grading principle, so
04:45:00 7 to speak, right?
04:45:02 8 A. It's their rubric, it's their approach.
04:45:05 9 Q. Photo tips should be easy to access?
04:45:09 10 A. That's -- that's the fourth bullet on 48.
04:45:12 11 Q. Okay. And then, finally -- or the last one I want to
04:45:15 12 mention to you, sir, is the second to the bottom there.
04:45:18 13 Users should be able to manually capture an image of the
04:45:23 14 front and back of the check and have the app accept such
04:45:26 15 submissions. Did I read that correctly?
04:45:29 16 A. Yeah, you read that correctly, but as I say, I don't
04:45:31 17 agree necessarily with all of the philosophy here.
04:45:34 18 Q. Understood, sir. But can we at least agree that that
04:45:38 19 is describing what we've discussed as manual capture?
04:45:41 20 A. Oh, that is -- yes, it says that exactly. It's manual
04:45:46 21 capture.
04:45:46 22 Q. And --
04:45:53 23 MR. MELSHEIMER: May I have one moment, Your
04:45:55 24 Honor?
04:45:55 25 THE COURT: You may.

04:46:29 1 Q. (By Mr. Melsheimer) Mr. Calman, thank you.

04:46:31 2 MR. MELSHEIMER: Pass the witness, Your Honor.

04:46:32 3 THE COURT: All right. Is there redirect,

04:46:34 4 Ms. Glasser?

04:46:34 5 MS. GLASSER: Yes, Your Honor.

04:46:35 6 MR. MELSHEIMER: Just give me a second here.

04:46:45 7 THE COURT: If neither of you counsel are going to

04:46:47 8 continue to use this easel, let's put it back where it was,

04:46:49 9 so it doesn't block that pathway, please?

04:46:53 10 MR. MELSHEIMER: I will do that right now,

04:46:55 11 Your Honor, with the Court's permission.

04:46:56 12 THE COURT: That will be fine.

04:47:10 13 All right. Counsel, you may proceed with

04:47:13 14 redirect.

04:47:13 15 MS. GLASSER: Thank you, Your Honor.

04:47:13 16 REDIRECT EXAMINATION

04:47:13 17 BY MS. GLASSER:

04:47:16 18 Q. Did opposing counsel ask any questions at all about

04:47:20 19 your methodology for calculating the error free rates?

04:47:25 20 A. I don't remember any questions about that.

04:47:28 21 Q. All right. Let's turn to a topic that he did ask you

04:47:31 22 about.

04:47:32 23 MS. GLASSER: Could we have on the screen

04:47:34 24 Paragraph 390 from your report? And actually if you could

04:47:42 25 continue on to the next page, please, the paragraph

04:47:45 1 continues with that chart.

04:47:47 2 Q. (By Ms. Glasser) Is this a larger, more detailed
04:47:49 3 version of the chart from --

04:47:51 4 MS. GLASSER: Actually go to the second part,
04:47:53 5 sorry. Thanks so much. It's a long paragraph.

04:47:56 6 Q. (By Ms. Glasser) Is this a longer and more detailed
04:47:58 7 version of the chart that Mr. Melsheimer showed you from
04:48:00 8 Paragraph 515?

04:48:01 9 A. Yes.

04:48:06 10 Q. All right. And as you discussed with opposing counsel,
04:48:09 11 the rates go up year to year, correct?

04:48:11 12 A. Yes, indeed.

04:48:14 13 Q. Could you explain for us how the trend from 2012
04:48:20 14 through to 2018 supports your opinions regarding the
04:48:24 15 fundamental nature of auto capture?

04:48:25 16 A. Sure. So, I mean, we pointed out that that first year
04:48:29 17 the yellow line exceeded even the high estimate by 25
04:48:33 18 percent. So it was bigger. It was more -- as I said when
04:48:36 19 we talked earlier, it was more successful than even
04:48:39 20 anticipated.

04:48:40 21 Now, once auto capture came along, it wasn't just
04:48:45 22 a 25 percent boost; now it was 50, 75. As I recall when
04:48:51 23 you get to the end, it's something like 250 percent higher
04:48:54 24 than the highest expectation once auto capture was part of
04:48:59 25 the game.

04:48:59 1 So, yes, Wells Fargo underestimated, and in 2013,
04:49:07 2 that was, you know, by 25 percent. But that 25 percent
04:49:10 3 just got bigger and bigger and bigger once auto capture was
04:49:14 4 available.

04:49:14 5 Q. When we look at the actual volumes from, say, the year
04:49:20 6 2017, the year of the Futurion Report, in your opinion,
04:49:23 7 could those levels have been sustainable without auto
04:49:27 8 capture?

04:49:27 9 A. No, ma'am.

04:49:28 10 Q. Why is that?

04:49:29 11 A. Well, at scale, manual capture just creates too many
04:49:35 12 errors. There's too much rework and there's too much
04:49:39 13 expense going on when you're now doing -- we're talking
04:49:43 14 2017, 61 million, 61-and-a-half million deposits. If 30
04:49:49 15 percent of those have problems, that's just -- that's too
04:49:52 16 much. It's not sustainable.

04:49:53 17 Q. Thank you very much, sir.

04:49:55 18 THE COURT: You pass the witness, counsel?

04:49:57 19 MS. GLASSER: Pass the witness, thank you.

04:49:59 20 THE COURT: Is there additional cross,
04:50:00 21 Mr. Melsheimer?

04:50:01 22 MR. MELSHEIMER: There's not, Your Honor.

04:50:02 23 THE COURT: All right. You may step down,
04:50:04 24 Mr. Calman.

04:50:11 25 Counsel, approach the bench, please.

04:50:12 1 (Bench conference.)

04:50:23 2 THE COURT: Plaintiff, who is your next witness?

04:50:26 3 MR. BUNT: Mr. Weinstein.

04:50:27 4 THE COURT: And you're going to put on the direct?

04:50:30 5 MR. BUNT: Yes, Your Honor.

04:50:30 6 THE COURT: What's your estimate of time for the

04:50:32 7 direct?

04:50:32 8 MR. BUNT: About 45 to 50 minutes.

04:50:36 9 THE COURT: Who's going to cross him?

04:50:37 10 MR. MELSHEIMER: Wes Hill.

04:50:39 11 THE COURT: Do you have any idea what his planned

04:50:42 12 cross is?

04:50:42 13 MR. MELSHEIMER: About an hour.

04:50:44 14 THE COURT: After Weinstein, what does the

04:50:47 15 Plaintiff have?

04:50:47 16 MR. SHEASBY: We have some depo clips, Your Honor.

04:50:51 17 MR. MELSHEIMER: 20 minutes.

04:50:54 18 MR. SHEASBY: Then we rest.

04:50:54 19 THE COURT: Okay.

04:50:54 20 MR. SHEASBY: I will say, on behalf of

04:50:56 21 Mr. Melsheimer, I think we're way ahead. I think this is

04:50:59 22 going to go to the jury on Tuesday based on -- based on

04:51:02 23 where we're at.

04:51:03 24 THE COURT: You're more optimistic than I am,

04:51:06 25 especially given the disagreements I've seen so far. When

04:51:09 1 we get to the charge, I don't expect it to go very fast at
04:51:13 2 all.

04:51:13 3 MR. MELSHEIMER: If you were in a Halloween mood,
04:51:16 4 though, Judge, you could let the people go trick or
04:51:19 5 treating earlier. But we're prepared to go. We're not
04:51:22 6 going to run out of stuff today, even if you go to 6:00
04:51:25 7 o'clock.

04:51:25 8 THE COURT: I would like to see if we can time it
04:51:28 9 so that the Plaintiff rests at the time I have to go to
04:51:31 10 Tyler tomorrow and that we have an even break. And then
04:51:34 11 the Defendant can start Monday with their case-in-chief.

04:51:36 12 MR. MELSHEIMER: I don't think there's any --
04:51:39 13 well, hard to know, as you know. I've been wrong on many
04:51:43 14 of my predictions, but I think that we will go into
04:51:46 15 tomorrow morning with the Plaintiff's case. Whether we go
04:51:50 16 all the way to noon, that's what I don't know.

04:51:55 17 THE COURT: All right. This just was an estimate,
04:51:56 18 and I appreciate the input.

04:51:58 19 Let's go ahead and put his direct on.

04:52:00 20 MR. MELSHEIMER: Will we be doing the cross, as
04:52:02 21 well, today, Your Honor, do you think?

04:52:05 22 THE COURT: I don't know.

04:52:05 23 MR. MELSHEIMER: Okay. Thank you.

04:52:07 24 (Bench conference concluded.)

04:52:10 25 MR. SHEASBY: Your Honor, with permission, may I

04:52:11 1 clear binders and --

04:52:13 2 THE COURT: Yes, please do.

04:52:22 3 While that's going on, Plaintiff, call your next

04:52:25 4 witness.

04:52:27 5 MR. BUNT: Your Honor, we'd call Mr. Roy

04:52:33 6 Weinstein.

04:52:33 7 THE COURT: If you'd come forward and be sworn,

04:52:35 8 Mr. Weinstein.

04:52:43 9 (Witness sworn.)

04:52:44 10 THE COURT: Please have a seat on the witness

04:52:58 11 stand, sir.

04:53:18 12 MR. BUNT: May it please the Court.

04:53:19 13 THE COURT: You may proceed, Mr. Bunt.

04:53:21 14 MR. BUNT: Thank you, Your Honor.

04:53:21 15 ROY WEINSTEIN, PLAINTIFF'S WITNESS, SWORN

04:53:21 16 DIRECT EXAMINATION

04:53:22 17 BY MR. BUNT:

04:53:22 18 Q. Please state your name for the jury.

04:53:24 19 A. Roy Weinstein.

04:53:25 20 Q. And can you tell the jury a little bit about yourself?

04:53:28 21 A. I'm an economist. I live in Los Angeles, California.

04:53:33 22 I'm married with two grown children and one grandchild.

04:53:37 23 Q. And what do you do in California?

04:53:39 24 A. I'm a managing director at an economic research and

04:53:45 25 consulting firm called Micronomics, which I co-founded back

04:53:50 1 in 1988.

04:53:50 2 Q. And why are you here today, Mr. Weinstein?

04:53:53 3 A. I'm here to talk about damages adequate to compensate

04:53:59 4 USAA for infringement of the patents-in-suit by Wells

04:54:05 5 Fargo.

04:54:05 6 Q. Mr. Weinstein, we'll want to go over your analysis in

04:54:09 7 greater detail in a moment, but can you first provide the

04:54:12 8 jury with your conclusion as to the damages owed by Wells

04:54:15 9 Fargo to USAA?

04:54:16 10 A. Yes. I have concluded that damages adequate to

04:54:21 11 compensate for infringement of the two patents-in-suit for

04:54:25 12 the period December 15th, 2016, until November 4th, 2019,

04:54:32 13 are \$299,757,000.00.

04:54:38 14 Q. And can you summarize at a very high level how you

04:54:40 15 calculated those figures?

04:54:42 16 A. Yes. There are three steps to my calculation in -- in

04:54:51 17 summary.

04:54:53 18 First, I calculated the benefits obtained by

04:54:59 19 Wells Fargo in connection with its use of auto capture MRDC

04:55:06 20 during the damage period. That's December of 2016 to

04:55:12 21 November 2019. That was the first step.

04:55:16 22 The second step was to apportion those benefits

04:55:21 23 down just to the contribution of the two patents-in-suit.

04:55:26 24 And so that apportionment produced the second number here,

04:55:32 25 approximately \$373 million, which reflects the contribution

04:55:38 1 of the patents-in-suit to auto capture MRDC.

04:55:44 2 The final step was to decide how that split should
04:55:49 3 be made with respect to the \$373 million as between Wells
04:55:57 4 Fargo and USAA. And that final step produced my ultimate
04:56:03 5 answer of \$299 million to USAA in connection with the
04:56:10 6 inventions, and the balance to Wells Fargo. And that is
04:56:16 7 based on Wells Fargo return on equity at roughly the damage
04:56:21 8 period time.

04:56:23 9 Q. And what is it that enables you to be able to come up
04:56:27 10 with that figure?

04:56:27 11 A. Well, I'm an economist. And as an economist, I have
04:56:35 12 academic training in accounting and finance and those kinds
04:56:38 13 of issues.

04:56:39 14 But the other thing I would say is that one of the
04:56:43 15 prime subjects that economists study is -- is values in the
04:56:48 16 market -- that's roughly the fourth checkmark on this
04:56:51 17 chart -- how prices are determined, how products such as
04:56:58 18 intellectual property are valued in the market, the use of
04:57:03 19 benchmarks in order to measure values.

04:57:08 20 And so in -- in -- in reaching my conclusions
04:57:12 21 here, I rely on my training as an economist and my
04:57:14 22 experience over the years.

04:57:18 23 Q. Mr. Weinstein, is your firm being compensated for the
04:57:21 24 work you've done on this case?

04:57:23 25 A. Yes, the firm that I work for, Micronomics, receives

04:57:26 1 compensation for my time at the rate of \$750.00 per hour.

04:57:30 2 Q. Is it routine for experts like yourself and Wells

04:57:34 3 Fargo's experts to be compensated for the time spent

04:57:37 4 analyzing problems like this?

04:57:39 5 A. Yes, sir.

04:57:39 6 Q. Could you tell the jury about your educational

04:57:43 7 background?

04:57:43 8 A. Yes. I attended the Baruch College of City University

04:57:52 9 of New York and graduated with a Bachelor of Business

04:57:56 10 Administration degree back in 1964 with honors, in

04:58:00 11 economics.

04:58:00 12 From there, I went to the University of Chicago

04:58:03 13 and received a Master of Arts degree, also in economics.

04:58:06 14 Q. Did you receive any honors and awards in connection

04:58:09 15 with your education?

04:58:11 16 A. Yes, sir, I did. If you go to the next slide, I had --

04:58:14 17 I had some awards at City College in connection with

04:58:19 18 academic performance. And then at the University of

04:58:22 19 Chicago I received fellowships from Walgreen Foundation and

04:58:26 20 the U.S. Public Health Service.

04:58:28 21 Q. And have you been honored, since leaving school, for

04:58:33 22 your work as a professional economist?

04:58:35 23 A. I have. Roughly 10 years ago I received what was

04:58:39 24 called the Career Achievement Award from the Business and

04:58:42 25 Economics Alumni Society at City College. I was the first

04:58:47 1 recipient of that award, and I think there's been one
04:58:50 2 other.

04:58:50 3 Q. Can you tell the jury some of the consulting clients
04:58:53 4 you've had over the course of your career?

04:58:56 5 A. Yes. Over my career, I've been engaged by companies
04:59:01 6 like eBay, Intel, Dell Computer, Halliburton. In Los
04:59:08 7 Angeles, by the Rose Bowl Committee in connection with the
04:59:11 8 Rose Parade and the Rose Bowl to try and determine the
04:59:12 9 economic impact of those events on the surrounding
04:59:16 10 community. So I've had lots of interesting clients over
04:59:19 11 the years.

04:59:19 12 Q. Have you written or spoken about some of the work
04:59:22 13 you've done related to the subjects of patents and patent
04:59:25 14 damages, in the past?

04:59:26 15 A. Yes, sir, I have. The first article that I published
04:59:31 16 on the subject of patent damages was one that I prepared
04:59:35 17 back in 1988. And it was published in the Journal of the
04:59:42 18 Patent and Trademark Office Society. I subsequently
04:59:45 19 published articles in the Journal of Law & Technology and
04:59:48 20 the Federal Bar Circuit Journal.

04:59:52 21 Q. And have you ever taught or given lectures on
04:59:52 22 determining the amount that should be paid for patent
04:59:59 23 infringement?

04:59:59 24 A. Yes. Over the years, I've been invited from time to
05:00:04 25 time to speak on the subject of how patent damages are

05:00:07 1 calculated and issues associated with those kinds of
05:00:11 2 calculations. I've appeared before technologists in
05:00:14 3 Washington, D.C., on that subject and several times at an
05:00:16 4 annual conference held every November in Plano, Texas.

05:00:21 5 MR. BUNT: Your Honor, at this time, we would
05:00:22 6 offer Mr. Roy Weinstein as an expert on the valuation of
05:00:27 7 intellectual property and the calculation of patent
05:00:29 8 damages.

05:00:29 9 THE COURT: Is there objection?

05:00:31 10 MR. HILL: No objection, Your Honor.

05:00:32 11 THE COURT: The Court will recognize this witness
05:00:33 12 as an expert in those designated fields.

05:00:35 13 Proceed.

05:00:37 14 MR. BUNT: Thank you, Your Honor.

05:00:37 15 Q. (By Mr. Bunt) So, Mr. Weinstein, what materials did
05:00:39 16 you consider in reaching your conclusions in this case?

05:00:42 17 A. So I had -- I had access to three types of materials.
05:00:48 18 There were documents produced by USAA, documents produced
05:00:52 19 by Wells Fargo, and then other materials, which I gathered
05:00:56 20 on my own, at Micronomics.

05:00:59 21 And so in order to do the work that -- that I'll
05:01:02 22 be describing today, I had access to all those different
05:01:06 23 kinds of -- different kinds of materials and documents and
05:01:09 24 testimony.

05:01:10 25 Q. What's your understanding of why patent rights are

05:01:14 1 important in the United States?

05:01:17 2 A. Well, patent rights are extremely important in -- in
05:01:22 3 our country for the following reason: By granting a
05:01:32 4 patent, what the government is doing is giving the
05:01:35 5 inventor, the patent owner, the rights to exclude anyone
05:01:38 6 else from using the invention without permission. That's
05:01:42 7 what it means to have a patent.

05:01:44 8 And so if -- if -- if an entity invents something,
05:01:48 9 it has the sole right to use that unless it chooses to give
05:01:53 10 permission to someone else to use that patent.

05:01:59 11 And the idea here is to encourage innovation that
05:02:04 12 leads to inventions that can be used by the entities that
05:02:07 13 want permission to use them, as well as by consumers that
05:02:12 14 benefit ultimately from -- from those inventions and those
05:02:16 15 patents.

05:02:17 16 Q. Is there a name for the agreements that are sometimes
05:02:20 17 reached between patentholders and entities that wish to
05:02:23 18 have access to their patents?

05:02:25 19 A. Yes, sir, there is. Those are called license
05:02:29 20 agreements.

05:02:29 21 Q. And, typically, do those license agreements include
05:02:33 22 payment terms?

05:02:33 23 A. They do. And -- and the idea here is that the
05:02:37 24 inventor, the patentholder, gives permission to use its
05:02:44 25 invention in exchange for payment.

05:02:46 1 Q. How do these license agreements come into existence?

05:02:49 2 A. Typically, they come into existence through

05:02:52 3 negotiations. If -- if someone has an invention and

05:02:55 4 someone else wants to use it, typically, what they do is

05:02:59 5 sit down across the table and negotiate for that

05:03:04 6 permission.

05:03:05 7 And the idea is, obviously, the patentholder would

05:03:08 8 like to get as much as it can for the invention. And

05:03:13 9 the -- the licensee, the entity that wants permission,

05:03:18 10 would like to pay as little as possible. So it's a

05:03:21 11 negotiation. And they wind up someplace, if they can, with

05:03:25 12 a patent license.

05:03:27 13 Q. In connection with your work in this case, how did you

05:03:30 14 go about determining what constitutes fair compensation to

05:03:34 15 USAA for use of the patents-in-suit?

05:03:36 16 A. Well, I began with the patent statute, and the relevant

05:03:44 17 portion of that statute is shown here. And what the

05:03:47 18 statute says is that if there's a finding of infringement,

05:03:55 19 the patentholder is entitled under that statute to

05:04:01 20 compensation that in no event is less than a reasonable

05:04:06 21 royalty for use made of the invention by the infringer.

05:04:14 22 So if I could paraphrase that very quickly. The

05:04:17 23 payment that's to be made for infringement is to be based

05:04:20 24 on the use made by the infringer for the patents. That's

05:04:25 25 what the statute says.

05:04:26 1 Q. And how does one determine damages adequate to
05:04:30 2 compensate for infringement?

05:04:32 3 A. Well, that's -- that's actually an interesting
05:04:37 4 question. And here's how it's done in this kind of
05:04:41 5 situation.

05:04:41 6 What you do is you put the parties together, and
05:04:44 7 that's what's depicted on this slide, and you have them
05:04:47 8 conduct what's called a hypothetical negotiation. It's
05:04:50 9 called a hypothetical negotiation because it didn't
05:04:53 10 actually happen. And so it's hypothetical. But what you
05:04:58 11 do is you have them negotiate on -- for permission to use
05:05:04 12 the technology.

05:05:05 13 And so what we see here is USAA on one side of
05:05:09 14 this negotiating table, and it's offering the patented
05:05:13 15 technology to Wells Fargo -- that's why the arrow goes that
05:05:17 16 way -- in exchange for payment by Wells Fargo for use of
05:05:23 17 that technology. And that's how that hypothetical
05:05:26 18 negotiation takes place. Again, it's called hypothetical
05:05:28 19 because it didn't happen, which is why we're here today.

05:05:31 20 And the timing of -- of this hypothetical
05:05:38 21 negotiation is back before infringement began. And so in
05:05:42 22 this case, it's March 2015. And so if you think about
05:05:45 23 that, it's a hypothetical negotiation between the parties
05:05:49 24 for permission to use the technology in exchange for
05:05:52 25 payment at the time of infringement.

05:05:55 1 Q. And does the question of whether Wells Fargo was
05:05:58 2 willfully infringing the patents come into play?
05:06:01 3 A. No. That has -- that has nothing to do with it,
05:06:04 4 whether or not they -- it was -- it was infringement that
05:06:08 5 was intentional or infringement that was by accident makes
05:06:13 6 no difference. The idea here is to have this hypothetical
05:06:19 7 negotiation for rights to use the patent based on use made
05:06:24 8 by Wells Fargo of the patent.
05:06:27 9 Q. Are there certain assumptions that economists have to
05:06:31 10 make for purposes of this hypothetical negotiation?
05:06:33 11 A. Yes, sir, there are.
05:06:35 12 Q. And what are those?
05:06:37 13 A. And this -- this is another interesting part about this
05:06:42 14 hypothetical negotiation.
05:06:43 15 Both parties sitting at this negotiating table
05:06:47 16 agree that the patents are valid, that they are infringed,
05:06:51 17 and that they are enforceable. They also understand the
05:06:55 18 need to reach an agreement that is -- at this hypothetical
05:07:01 19 negotiation neither side can get up and leave the table.
05:07:02 20 They have to get to the finish line and reach an agreement.
05:07:06 21 And the third aspect of this is something that's
05:07:10 22 very different from a real-world negotiation, which is
05:07:14 23 they -- they both understand the importance of the patents.
05:07:20 24 Back in March -- in 2015 at the time that the hypothetical
05:07:25 25 negotiation -- May of 2015, they haven't, in a sense they

05:07:31 1 have insight into the future importance of the patents,
05:07:35 2 and -- and they know it back then. And that's information
05:07:37 3 that's available to them at this hypothetical negotiation.
05:07:41 4 Q. Are these assumptions different from a real-world
05:07:44 5 negotiation?
05:07:44 6 A. Yes, they are. Obviously, in a real-world negotiation,
05:07:51 7 typically, the parties will negotiate about everything.
05:07:53 8 There may not be agreement about whether the patents are
05:07:56 9 valid or can be enforced or whether they're infringed. And
05:07:59 10 certainly in a real-world negotiation, there's -- there's
05:08:03 11 not as much information about the future as there is in
05:08:07 12 this hypothetical negotiation.
05:08:09 13 But in the hypothetical negotiation, that -- that
05:08:12 14 first bullet point there about validity, infringement, and
05:08:15 15 enforceability, is off the table. Both sides agree about
05:08:19 16 that for purposes of this framework, and they also have
05:08:24 17 this information about the ultimate value of the patents,
05:08:31 18 that is, the actual use made by Wells Fargo in this case
05:08:34 19 about the patents, even though the negotiation is before
05:08:36 20 that use takes place.
05:08:37 21 Q. Now, you just identified certain assumptions that are
05:08:42 22 made as a part of the hypothetical negotiation. Is there
05:08:44 23 anything else that you relied upon in forming your opinions
05:08:49 24 in this case?
05:08:49 25 A. Yes. So to reach my conclusions, I relied on, I guess,

05:08:53 1 two more things. One is my training and experience in this
05:08:57 2 area having written and spoken about it for many years,
05:09:01 3 plus my training as an economist. And the other thing that
05:09:06 4 I rely on is something that I'll get to very shortly in my
05:09:10 5 testimony, which is referred to as the Georgia-Pacific
05:09:12 6 factors.

05:09:13 7 Q. Okay. So did -- did Wells -- did USAA ask Wells Fargo
05:09:20 8 to license the remote deposit capture patents in this suit?

05:09:27 9 MR. BUNT: If we can go to the next slide.

05:09:29 10 A. Yes, sir. So there actually was a real-world effort on
05:09:32 11 the part of USAA to obtain a license agreement with Wells
05:09:39 12 Fargo.

05:09:39 13 And what's on the screen now is a -- an email from
05:09:45 14 Ron Epstein, who represented USAA at the time in connection
05:09:47 15 with its licensing efforts, to individuals at Wells Fargo.
05:09:53 16 And this email is dated August of 2017. And the snippet
05:09:58 17 that's on the screen references an effort to -- to license
05:10:10 18 USSA's -- USAA's technology to Wells Fargo back then.

05:10:16 19 Q. (By Mr. Bunt) Now, Mr. Weinstein, is mobile deposit,
05:10:19 20 which we've been referring to as MRDC, important to Wells
05:10:25 21 Fargo?

05:10:25 22 A. I believe it is.

05:10:26 23 Q. How do you know it's important to Wells Fargo?

05:10:29 24 A. Well, I've been here for the trial and I heard the
05:10:29 25 testimony. I've also had an opportunity to look at the

05:10:34 1 documents that I referenced before. And there also are
05:10:40 2 quotations that I've had a chance to read in preparing
05:10:44 3 prior to today, and this is one from a Wells Fargo senior
05:10:50 4 vice president.

05:10:50 5 It's not -- it's not a direct quote, but it's a
05:10:55 6 paraphrase of his testimony wherein he talks about mobile
05:11:05 7 remote deposit capture as a table stakes capability. And
05:11:10 8 what table stakes means in this context is, if you're going
05:11:14 9 to be in this space, you have to have it. If you're going
05:11:18 10 to be doing it, you have to have this functionality.

05:11:20 11 Q. Now, to be clear, is this lawsuit over MRDC, generally?

05:11:24 12 A. No. The lawsuit is about MRDC, but the focus of my
05:11:29 13 damages analysis is in connection with the auto capture
05:11:33 14 feature, the auto capture functionality.

05:11:36 15 Q. And is this auto-capture-enabled MRDC important to
05:11:43 16 Wells Fargo?

05:11:43 17 A. Yes, sir, it is.

05:11:44 18 Q. What evidence have you seen of the importance of the
05:11:47 19 auto-capture-enabled MRDC to Wells Fargo?

05:11:50 20 A. Well, this is a snippet of testimony, sworn testimony
05:11:57 21 by Mr. Saffici, who we've heard about before in this case.
05:12:02 22 And his -- the question and answer essentially stands for
05:12:07 23 the proposition that auto capture is widely accepted as the
05:12:12 24 foundation for successful MRDC.

05:12:17 25 Q. And Mr. Saffici is one of Wells Fargo's experts?

05:12:20 1 A. He's -- he's -- he was at one time, for sure, yes.

05:12:23 2 Q. And did you find any evidence that Wells Fargo views

05:12:27 3 auto capture as essential?

05:12:29 4 A. Yes, sir.

05:12:30 5 Q. And what did you find?

05:12:32 6 A. So this is more testimony from Mr. Ajami, who's a Wells

05:12:37 7 Fargo senior vice president, and he has no factual basis to

05:12:42 8 disagree with the statement that auto capture is a

05:12:47 9 must-have feature. That's the top part of this slide.

05:12:51 10 And the bottom part is the -- from the Futurion

05:12:56 11 study in 2017 that we've seen before in this case, which

05:13:00 12 says that auto capture must now be treated as a must-have

05:13:05 13 feature across the financial services industry. So it's

05:13:09 14 not -- it's not just banks like Wells Fargo. It's other

05:13:16 15 banks and it's financial services generally speaking.

05:13:20 16 Q. And the Plaintiff's exhibit on this, the Futurion

05:13:23 17 document at the bottom, is that PX-005?

05:13:25 18 A. Yes, sir.

05:13:26 19 Q. And what conclusion have you reached as to the

05:13:28 20 importance of auto capture?

05:13:29 21 A. I've concluded that auto capture is essential for an

05:13:35 22 essential MRDC functionality.

05:13:39 23 Q. So how did you go about calculating damages in this

05:13:43 24 case?

05:13:43 25 A. All right. So now, I used what are called the

05:13:49 1 Georgia-Pacific factors.

05:13:50 2 Q. And what are those Georgia-Pacific factors?

05:13:53 3 A. They can be thought of as a checklist. It's a
05:13:56 4 checklist of things to consider in determining the -- the
05:14:00 5 value of the patents to the infringer, because, remember,
05:14:04 6 the statute contemplates benefits, use made by the
05:14:11 7 infringer of the patented technology.

05:14:14 8 And so Georgia -- the Georgia-Pacific factors come
05:14:18 9 from a former patent damage case, litigation case, and --
05:14:22 10 and -- and the Court in that case offered this checklist of
05:14:25 11 15 factors which the parties sitting at that negotiating
05:14:29 12 table having this hypothetical negotiation might think
05:14:32 13 about. And the idea is if you have this checklist, it will
05:14:38 14 help you get to the right answer.

05:14:40 15 Q. And are these Georgia-Pacific factors and the patent
05:14:47 16 statute that you showed the jury and the hypothetical
05:14:50 17 negotiation, are those used both by yourself and by Wells
05:14:53 18 Fargo's damage expert in this case?

05:14:54 19 A. Yes, sir, we both have the identical framework.

05:14:57 20 Q. And did you consider all 15 of these factors in
05:15:00 21 developing your reasonable royalty measure of damages?

05:15:03 22 A. I did. That said, in every case, some factors are --
05:15:10 23 turn out to be more important than others because some are
05:15:13 24 relevant in certain situations and not in others.

05:15:16 25 But I considered all 15, and we'll focus on those

05:15:22 1 that I found to be most relevant here.

05:15:24 2 Q. So where did you begin?

05:15:25 3 A. In this case, I began with Georgia-Pacific Factors 9
05:15:30 4 and 10, and I combined them because they both really talk
05:15:33 5 about the same thing. They talk about that the benefits
05:15:39 6 and the advantages of the patents and in the context of
05:15:42 7 what those benefits are in this case to Wells Fargo.

05:15:48 8 Q. Why did you start with those factors?

05:15:49 9 A. Well, if you're going to talk about the value of an
05:15:55 10 invention, one of the things that would be important to
05:15:57 11 know is how does that invention benefit the entity that's
05:16:02 12 taking the license in this case?

05:16:06 13 If Wells Fargo is going to be required to pay for
05:16:10 14 using this technology, a good starting point in this
05:16:15 15 particular case is to examine the uses and the benefits
05:16:20 16 from those uses that Wells Fargo obtained, because the
05:16:26 17 payments are going to have to be based at some level on
05:16:29 18 that.

05:16:30 19 Q. So what benefits did you find?

05:16:33 20 A. Well, I found basically three kinds of benefits to
05:16:41 21 Wells Fargo. And so in reaching my conclusion about
05:16:44 22 damages adequate to compensate for infringement, I thought
05:16:50 23 about what actual benefits did Wells Fargo get from using
05:16:54 24 those patents-in-suit, and there were three types.

05:16:57 25 They relate to cost savings that Wells Fargo

05:17:01 1 itself experienced by using these patents, also increased
05:17:07 2 profits that Wells Fargo obtained by using these patents,
05:17:12 3 and, finally, ecosystem benefits which relate to the brand
05:17:18 4 name and reputation value to Wells Fargo of having access
05:17:22 5 to this technology.

05:17:23 6 Q. Can you describe each of those benefits to the jury?

05:17:26 7 A. Sure. And I can do that fairly quickly.

05:17:28 8 The cost-savings benefits relate to the fact that
05:17:32 9 it costs Wells Fargo less money to process a mobile deposit
05:17:39 10 than it does to process a deposit made with a teller at a
05:17:44 11 bank or at an ATM.

05:17:46 12 And so a mobile deposit allows Wells Fargo to save
05:17:50 13 money. They're a cost-savings benefits.

05:17:54 14 In addition -- in addition, the availability of
05:17:59 15 successful mobile deposit program allows Wells Fargo to not
05:18:06 16 have as many bank branches as it otherwise would need. And
05:18:10 17 since it costs money to build and maintain bank branches,
05:18:14 18 Wells Fargo saves money by virtue of the fact that
05:18:17 19 consumers use mobile deposits with auto capture. That's
05:18:21 20 the cost-savings benefit.

05:18:22 21 The second benefit has to do with increased
05:18:26 22 profits. Wells Fargo makes more money on mobile deposits
05:18:31 23 than it does on other kinds of deposits. And so it
05:18:34 24 receives a benefit when consumers make mobile deposits.

05:18:38 25 And the third are these ecosystem benefits, which

05:18:44 1 Wells Fargo recognizes are associated with having a
05:18:46 2 successful mobile deposit program.

05:18:51 3 And so in deciding what those -- what the benefits
05:18:54 4 are, I looked at all three of those areas and ultimately
05:19:00 5 quantified them, because as the statute says, damages
05:19:05 6 should be related to use made of the invention by the
05:19:13 7 infringer.

05:19:13 8 Q. And do these three benefits, these three categories of
05:19:16 9 benefits, overlap?

05:19:17 10 A. No, they're separate. They don't overlap.

05:19:20 11 Q. Now, will you be telling the jury about the benefits of
05:19:23 12 MRDC, generally?

05:19:24 13 A. Yes, sir, I will. What I do is I will start with the
05:19:30 14 benefits of MRDC, generally, generally. But since my
05:19:37 15 understanding and conclusion is that auto capture is
05:19:42 16 essential, table stakes, with respect to the successful
05:19:47 17 operation of MRDC, I will then apportion down from the MRDC
05:19:53 18 benefits to the contribution of auto capture to creating
05:20:00 19 those benefits so that damages are limited to the
05:20:06 20 contribution made by the patents.

05:20:09 21 Q. So let's start with cost savings and go to the next
05:20:14 22 slide.

05:20:15 23 What evidence have you seen regarding the
05:20:17 24 cost-savings benefits of the patents-in-suit to Wells
05:20:19 25 Fargo?

05:20:19 1 A. This next slide relates to that first bullet point I
05:20:24 2 was talking about, cost savings. It's a 2011 Wells Fargo
05:20:29 3 planning document, PX-415.

05:20:32 4 So, at that time, in this planning document at
05:20:36 5 Wells Fargo, it says within it: The key benefits to
05:20:43 6 Wells Fargo include cost savings from moving deposits out
05:20:47 7 of the store -- the store in this context is the bank --
05:20:52 8 out of the bank and out of ATM channels.

05:20:55 9 And so Wells Fargo, back in 2011, recognized that
05:21:04 10 mobile remote deposit capture -- you can see that right
05:21:07 11 on the -- toward the top of the document itself -- would
05:21:09 12 provide those key benefits to Wells Fargo.

05:21:14 13 Q. And did Wells Fargo study the potential impact of MRDC
05:21:18 14 on its costs?

05:21:19 15 A. It did. This is November 2010. Again, it's -- it's
05:21:25 16 around the same period. And you'll notice at the top, it
05:21:29 17 says: MRDC offers Wells Fargo a lower cost channel for
05:21:35 18 deposits.

05:21:36 19 It's talking about the same thing that I've been
05:21:37 20 referencing. It costs Wells Fargo less money -- less money
05:21:44 21 to process a mobile deposit than an ATM deposit or a
05:21:47 22 deposit with a teller.

05:21:49 23 And what this document says is, MRDC has the
05:21:52 24 potential to produce \$99 million in savings over the next
05:21:55 25 three years -- just three years, \$99 million in those kinds

05:22:00 1 of benefits.

05:22:01 2 Q. And that document is PX-1069; is that correct?

05:22:04 3 A. Yes, sir.

05:22:05 4 Q. What other kinds of cost savings have you seen?

05:22:07 5 A. The second part of the cost savings bullet that I
05:22:12 6 identified had to do with fewer branches and the savings
05:22:16 7 that's associated with -- with not needing as many branches
05:22:19 8 to process deposits.

05:22:21 9 So this is a 2015 Bank of America document, and it
05:22:24 10 says that its customers deposit 250,000 checks per day
05:22:32 11 through their mobile devices and that the Bank of America
05:22:36 12 would need an additional 650 banks to handle that kind of
05:22:43 13 deposit activity.

05:22:44 14 Q. Now, that's Bank of America.

05:22:46 15 Can you tell the jury the number of mobile
05:22:49 16 deposits each day that Bank -- that Wells Fargo has in
05:22:52 17 comparison to Bank of America?

05:22:54 18 A. Yes. Wells Fargo has approximately 220,000 mobile
05:22:58 19 deposits a day, and I was able to calculate that number
05:23:01 20 from data produced to me by -- by Wells Fargo.

05:23:03 21 So they -- they both process an extraordinary
05:23:09 22 number of mobile deposits each day.

05:23:12 23 Q. And that's PX-1003; is that correct?

05:23:15 24 A. Yes, sir.

05:23:15 25 Q. Now, you touched on the cost-savings benefits of the

05:23:21 1 patents-in-suit. What was the next category of benefits
05:23:23 2 that you considered?

05:23:24 3 A. So the second category has to do with these increased
05:23:29 4 profits, and the point here is that Wells Fargo recognized
05:23:32 5 that it makes more money on mobile deposits than it does on
05:23:35 6 other kinds of deposits.

05:23:37 7 Q. What evidence did you see regarding increased profits
05:23:41 8 from Wells Fargo's use of the accused MRDC app?

05:23:44 9 A. So this slide, which I believe reflects something that
05:23:54 10 Wells Fargo was aware of in around 2012, is the results of
05:23:57 11 a survey and a pilot study that Wells Fargo conducted.

05:24:00 12 And on the right, you can see that the conclusion
05:24:02 13 is that MRDC customers are about 45 percent more profitable
05:24:09 14 on an annualized basis to -- to Wells Fargo than customers
05:24:14 15 who don't make mobile deposits but actually have the app
05:24:18 16 anyway.

05:24:19 17 And you can see that by looking at the height of
05:24:22 18 the bar on the right. It's about \$217.50. That's for MRDC
05:24:27 19 customers who made deposits, versus the \$150.00 associated
05:24:32 20 with the reference group. And this is basically Exhibit
05:24:35 21 PX-417.

05:24:36 22 Q. And then there's a bullet point down at the bottom.
05:24:39 23 Can you read that for the jury?

05:24:40 24 A. Yes. The bullet point at the left says: Mobile
05:24:44 25 deposit customers are one-and-a-half times more likely to

05:24:47 1 generate an annual profit of \$2,000.00 and have higher
05:24:51 2 deposit balances.

05:24:52 3 Q. And if the jury wants to look at that, that can be
05:24:55 4 found in Plaintiff's Exhibit No. 329; is that right?

05:24:58 5 A. I believe so.

05:24:59 6 Q. So did you see any other evidence on deposit profits?

05:25:05 7 MR. BUNT: If we can go to the next slide.

05:25:08 8 A. This slide is November 2010, and the interest -- it's
05:25:16 9 another Wells Fargo planning document in connection with
05:25:21 10 MRDC. You can see that in the -- in the text of the
05:25:24 11 document.

05:25:24 12 And what's highlighted on the right is that MRDC
05:25:30 13 provides Wells Fargo with the benefit of 20 percent of new
05:25:36 14 deposits that come to Wells Fargo just by virtue of the
05:25:39 15 fact that it's offering this MRDC app, this option.

05:25:43 16 Q. And is that PX-1069, for the jury's benefit?

05:25:48 17 A. Yes, sir, it is.

05:25:49 18 Q. And why is that -- that information important?

05:25:52 19 A. Well, Wells Fargo, like -- like -- like all banks,
05:25:56 20 makes money on deposits. That's -- that's one of the
05:25:59 21 businesses that they're in. And so if they're going to get
05:26:02 22 20 percent new deposits, that's a -- that's a big plus.

05:26:05 23 Q. Now, you've discussed cost-savings benefits and
05:26:07 24 increased profits benefits. Did you also investigate
05:26:11 25 ecosystem benefits?

05:26:12 1 A. I did. That was the third bullet. Ecosystem benefits
05:26:17 2 are the benefits to the bank, to Wells Fargo, by virtue of
05:26:21 3 having the ability to offer this functionality to its
05:26:25 4 customers.

05:26:25 5 Q. And what evidence have you seen regarding the ecosystem
05:26:29 6 benefits to Wells Fargo?

05:26:31 7 A. The -- the next slide, which is another Wells Fargo
05:26:37 8 planning document, this one done in 2011 with respect to
05:26:45 9 mobile remote deposit capture. Talks about a primary
05:26:46 10 benefit to Wells Fargo, being brand positioning and
05:26:50 11 reputation. Customers expect their financial institution
05:26:54 12 to provide this functionality.

05:26:56 13 And the other -- the other part that's -- that's
05:26:59 14 highlighted on this document is that customers listed
05:27:04 15 remote deposit as the number one pain point issue out of a
05:27:10 16 hundred. So it was really important. This functionality
05:27:13 17 was really important to customers. And Wells Fargo is --
05:27:16 18 is aware back in 2011 of this importance.

05:27:20 19 MR. BUNT: And, for the record, that's PX-14.

05:27:23 20 Q. (By Mr. Bunt) Did Wells Fargo also do internal studies
05:27:27 21 regarding the importance of MRDC with respect to customer
05:27:33 22 attention?

05:27:34 23 A. Yes, sir. This is another Wells Fargo study. I
05:27:36 24 believe it was around 2012. And it says that, on the
05:27:40 25 right, the highlighted portion: MRDC customers are nearly

05:27:45 1 two times less likely to basically leave the bank. It says
05:27:54 2 attrite. It means leave the bank.

05:27:56 3 Q. And is that PX-417?

05:27:58 4 A. Yes, sir.

05:27:59 5 Q. Did you find anything that would allow you to calculate
05:28:06 6 the ecosystem benefit provided by the accused MRDC app?

05:28:10 7 A. Yes, I did. I mentioned before that one of the things
05:28:13 8 economists do is they use benchmarks sometimes as a basis
05:28:18 9 for determining the value of goods or services or products.

05:28:22 10 And in this case, I feel like I had a good
05:28:28 11 benchmark for measuring the value of -- of the ecosystem
05:28:32 12 benefit to Wells Fargo, and that benchmark is -- is a
05:28:35 13 functionality called Zelle, Z-e-l-l-e.

05:28:37 14 Q. And what is Zelle?

05:28:39 15 A. Zelle is -- is a -- a way of -- of sending money
05:28:45 16 electronically instantly from one person to another.

05:28:48 17 Q. And why did you think that this was a good benchmark?

05:28:51 18 MR. BUNT: If we could go to the next slide.

05:28:53 19 A. There -- there were really four reasons why I thought
05:28:59 20 that Zelle was a -- was a useful benchmark here.

05:29:03 21 First, it's -- it's recognized as being table
05:29:05 22 stakes, just as auto capture is in the -- in the financial
05:29:09 23 community.

05:29:10 24 It's free to consumers. So when -- when a
05:29:14 25 consumer uses Zelle to transfer money from one account to

05:29:17 1 somebody somewhere else, the consumer doesn't pay. The
05:29:22 2 banks pay, however.

05:29:25 3 And, finally, Zelle is recognized as providing
05:29:29 4 ecosystem benefits. So it seemed like a good benchmark to
05:29:34 5 use for measuring that kind of benefit with respect to auto
05:29:37 6 capture.

05:29:37 7 Q. And are you aware of any testimony confirming your
05:29:41 8 opinion that it's a good benchmark?

05:29:44 9 A. Yes. This is from Mr. Easley, an AVP at USAA, and he
05:29:49 10 talks about Zelle as -- as providing a comparable benefit
05:29:52 11 in reference to the ability to send money from one person
05:29:56 12 to another. And describes that as an ecosystem benefit
05:29:59 13 with respect to access to money.

05:30:03 14 Q. How much do banks pay for access to Zelle?

05:30:07 15 A. Well, it varies. There's trade press that suggests
05:30:12 16 that they pay between 50 and 75 cents for every
05:30:16 17 transaction, even though it's free to the consumer. And
05:30:23 18 I've seen USAA documents that indicate that it pays as much
05:30:27 19 as 60 cents per transaction.

05:30:29 20 Q. And who is this money paid to?

05:30:31 21 A. It's paid to the -- the entities that essentially have
05:30:34 22 set up Zelle, and that's a consortium of banks. And one of
05:30:39 23 the banks that receives those funds is actually Wells
05:30:42 24 Fargo.

05:30:42 25 Q. Mr. Weinstein, do you have an opinion as to whether the

05:30:44 1 50- to 75-cent figures represent a conservative estimate of
05:30:51 2 the ecosystem value of MRDC?

05:30:51 3 A. Yes. Actually I think -- I think 60 cents -- something
05:30:54 4 in that range is conservative.

05:30:56 5 MR. BUNT: Can we go to the next slide, please?

05:30:58 6 A. And it's conservative for a couple of reasons, at
05:31:05 7 least. One is that, unlike auto capture, there are
05:31:11 8 alternatives to Zelle -- that is to say, there are other
05:31:14 9 ways of sending money from one person to another.

05:31:18 10 One that's pretty popular these days is Venmo.

05:31:22 11 And you can send money from one person to another using
05:31:26 12 Venmo. Whereas I'm not aware of any alternative to auto
05:31:30 13 capture.

05:31:30 14 And, second, as -- as we've just seen, there are
05:31:33 15 cost savings to the banks associated with mobile deposits
05:31:36 16 and auto capture.

05:31:38 17 Zelle doesn't provide a cost savings, and so in
05:31:40 18 that sense, auto capture is providing additional benefits
05:31:44 19 that aren't present with Zelle, which means 60 cents could
05:31:47 20 be too low.

05:31:48 21 MR. BUNT: Your Honor, may we approach the bench
05:31:50 22 for just a moment?

05:31:51 23 THE COURT: You may. Approach the bench, counsel.
05:31:53 24 (Bench conference.)

05:32:03 25 MR. BUNT: Your Honor, it looks like some of the

05:32:05 1 jurors are falling asleep, which I understand completely
05:32:08 2 given this type of stuff. Do you want to let them stretch
05:32:12 3 their legs for a minute or just keep trucking along?

05:32:15 4 THE COURT: How much more have you got on your
05:32:17 5 direct?

05:32:17 6 MR. BUNT: I've got like six more pages, so -- out
05:32:19 7 of 17. So I've got probably 15, 20 minutes.

05:32:22 8 THE COURT: I haven't seen anybody that looks like
05:32:24 9 they're going to sleep. We'll pause, and I'll let
05:32:27 10 everybody on the jury stand up for a few minutes, and then
05:32:30 11 we'll sit back down.

05:32:30 12 MR. BUNT: Thank you.

05:32:30 13 MR. MELSHEIMER: We're fine with the sleeping,
05:32:30 14 Your Honor.

05:32:30 15 THE COURT: Pardon?

05:32:31 16 MR. MELSHEIMER: We have no objection to the
05:32:32 17 sleeping, Your Honor.

05:32:34 18 THE COURT: Except when you're at the podium. I
05:32:37 19 understand.

05:32:37 20 (Bench conference concluded.)

05:32:44 21 THE COURT: Ladies and gentlemen, I'm not going to
05:32:45 22 recess, but we're all going to take 30 seconds and stand up
05:32:49 23 for a minute and stretch your legs, and then we're going to
05:32:53 24 sit back down. So everybody all rise.

05:33:13 25 All right. Be seated.

05:33:17 1 Counsel, let's continue.

05:33:18 2 MR. BUNT: Thank you, Your Honor.

05:33:20 3 Q. (By Mr. Bunt) Mr. Weinstein, you've been talking about

05:33:22 4 Factors 9 and 10 of the Georgia-Pacific factors. What's

05:33:25 5 the next Georgia-Pacific factor you considered?

05:33:28 6 A. The next -- the next one I thought was relevant here is

05:33:33 7 Georgia-Pacific Factor 5, which relates to the commercial

05:33:37 8 relationship between the entities. And in this case,

05:33:41 9 Wells Fargo and USAA.

05:33:43 10 And the significance of -- of Georgia-Pacific

05:33:47 11 Factor 5 is this. If the entities that are negotiating for

05:33:52 12 a license compete with one another, then the licensor is

05:33:56 13 going to want more than if they don't compete. And the

05:34:00 14 reason is that by providing that license, providing

05:34:05 15 permission to use the technology, it's essentially

05:34:07 16 impacting its own business.

05:34:09 17 It's giving that technology to the competitor.

05:34:12 18 It's not giving it away for free because it's going to get

05:34:18 19 paid. But, generally, you don't like giving commercial

05:34:21 20 advantages that you believe you have to your competitor.

05:34:23 21 And so Georgia-Pacific 5 recognizes that fact.

05:34:29 22 And so it says that in these kind of hypothetical

05:34:33 23 negotiations, that's something that the parties are going

05:34:36 24 to be aware of.

05:34:37 25 Q. Have you seen any evidence that USAA and Wells Fargo

05:34:40 1 compete directly with one another?

05:34:43 2 A. Yes, sir, I have.

05:34:45 3 MR. BUNT: Can we go to the next slide, please,

05:34:49 4 sir, Mr. Huynh?

05:34:49 5 A. This next slide is -- is a Wells Fargo ad, and it's

05:34:53 6 obviously targeting military service. And that's sort of a

05:35:01 7 core constituency of USAA. And so you don't really need

05:35:08 8 much more than to say -- to recognize the fact that not

05:35:12 9 only are they banks, but Wells Fargo is targeting the

05:35:15 10 military for its customer base. So they're -- they're

05:35:17 11 direct competitors.

05:35:18 12 Q. And this is PX-1083?

05:35:20 13 A. Yes, sir.

05:35:21 14 Q. And have you considered the possibility that maybe

05:35:24 15 Wells Fargo might not need to use the USAA patents-in-suit?

05:35:27 16 A. Yes, sir, I have.

05:35:29 17 Q. And what did you conclude?

05:35:31 18 A. Well, I concluded that they thought about trying to

05:35:34 19 find a way to avoid having to take a license from USAA, but

05:35:39 20 instead, doing it themselves perhaps.

05:35:45 21 MR. BUNT: Can we have the next slide? Yes,

05:35:48 22 thanks.

05:35:48 23 A. So this is another Wells Fargo planning document, dated

05:35:52 24 2011, in which it's considering ways of developing its own

05:36:01 25 auto capture functionality. And, among other things, the

05:36:05 1 document references how long it would take, 9 to 18 months,
05:36:09 2 and the fact that even after spending that time, the
05:36:12 3 technology they get might not be what they really needed.

05:36:15 4 And so what -- what this relates to is -- is -- is
05:36:21 5 the fact that if there's an alternative to taking a
05:36:26 6 license, the ability to use that alternative will limit how
05:36:31 7 much one would pay for that license, and here, what we see
05:36:34 8 is Wells Fargo considering that possibility, but not -- not
05:36:40 9 finding that to be a useful path to go down.

05:36:43 10 Q. (By Mr. Bunt) Did you have any information from
05:36:46 11 Mr. Calman about whether there were any commercially viable
05:36:48 12 alternatives to the patents-in-suit?

05:36:50 13 A. Yes, sir, I did.

05:36:52 14 Q. What did he say?

05:36:54 15 A. Well, this is not --

05:36:55 16 MR. BUNT: Let's go back to the previous slide, if
05:36:57 17 we could.

05:36:58 18 A. Yeah, the Calman -- what Mr. Calman said is he was not
05:37:00 19 aware of any commercially viable non-infringing
05:37:04 20 alternatives.

05:37:05 21 Q. (By Mr. Bunt) And just for the jury's record, this is
05:37:07 22 PX-14, the document you were just showing the jury about
05:37:12 23 the unavailability of an internal RDC capability at Wells
05:37:19 24 Fargo?

05:37:19 25 MR. BUNT: Now, let's go to the next slide,

05:37:21 1 please, sir.

05:37:22 2 Q. (By Mr. Bunt) What other evidence did you see that
05:37:24 3 there were no viable non-infringing alternatives to the
05:37:26 4 patents-in-suit?

05:37:26 5 A. Well, apart from -- from what I just testified to about
05:37:30 6 Mr. Calman, there also was sworn testimony by Mr. Jitodai
05:37:34 7 at Wells Fargo who was their corporate representative; in
05:37:38 8 other words, he spoke and speaks for the company.

05:37:40 9 And he was asked about whether manual capture
05:37:46 10 option would -- would be a possible alternative, in the
05:37:51 11 sense that it would be sufficiently reliable. And he
05:37:54 12 really couldn't say anything about the success rate
05:37:56 13 associated with -- with that option.

05:37:59 14 MR. BUNT: Let's go to the next slide.

05:38:01 15 Q. (By Mr. Bunt) Can you briefly summarize the benefits
05:38:03 16 that you quantified?

05:38:04 17 A. Yes. So I talked about the three general types of --
05:38:11 18 of benefits associated with Wells Fargo's use of the
05:38:18 19 patents-in-suit. And I did -- I did that because that's
05:38:22 20 what the statute says I should do, look at the benefits to
05:38:27 21 the infringer.

05:38:27 22 And I went ahead and quantified those benefits.
05:38:33 23 The cost-savings benefits are approximately \$476 million;
05:38:37 24 the increased profits, \$316 million; the ecosystem
05:38:45 25 benefits, \$139 million, for a total of \$932 million for the

05:38:50 1 damage period December 15th, 2016, to November 4th, roughly
05:38:55 2 the trial date right now, 2019. And these are benefits
05:38:58 3 associated with auto capture-enabled MRDC.

05:39:05 4 MR. BUNT: So let's go to the next slide.

05:39:07 5 Q. (By Mr. Bunt) And can you explain how you quantified
05:39:09 6 these specific benefits?

05:39:11 7 A. Right. So now we're going to go back and see where
05:39:14 8 those numbers came from. And we start with the
05:39:16 9 cost-savings benefits.

05:39:18 10 And with respect to the cost-savings benefits,
05:39:19 11 we're talking about what's called channel optimization,
05:39:23 12 which has to do with the fact that it costs Wells Fargo
05:39:26 13 less money to process a mobile deposit than it does to
05:39:30 14 process a deposit made at an ATM or in the bank.

05:39:34 15 And what this slide depicts is information that
05:39:39 16 was provided by Wells Fargo on its actual costs associated
05:39:44 17 with processing deposits at each of the three channels that
05:39:49 18 are shown here.

05:39:52 19 And what I did is I looked at those costs,
05:39:55 20 tabulated them, and then calculated the cost savings
05:39:58 21 associated with mobile deposits relative to each of those
05:40:03 22 channels. And the cost savings are shown at Lines 4 and 4.
05:40:09 23 You can calculate them right from -- right from this
05:40:11 24 demonstrative.

05:40:12 25 Q. So, for example, if we go up to the 2018 column that

05:40:16 1 says Teller Check Only Deposit, that's -- what is that
05:40:21 2 telling the jury?
05:40:22 3 A. That's what it cost Wells Fargo to process a check
05:40:26 4 that's deposited at the bank.
05:40:28 5 Q. And then --
05:40:29 6 A. \$2.75.
05:40:30 7 Q. -- and then the second line under 2018, what is that
05:40:36 8 cost?
05:40:36 9 A. That's the \$1.58 associated with processing an ATM
05:40:42 10 deposit.
05:40:42 11 Q. And then this third one, what does that show?
05:40:44 12 A. That's approximately 36 cents for a mobile deposit.
05:40:48 13 Q. So the -- the cost savings you see here on Line 4,
05:40:51 14 that's the difference -- if you could just explain one more
05:40:57 15 time the difference between teller check and mobile
05:41:01 16 deposit. Is that correct?
05:41:01 17 A. Right. Line -- Line 4 is -- is basically Line 1 minus
05:41:06 18 Line 3, teller minus mobile deposit, that's correct.
05:41:07 19 Q. And then did you do that for each year of data that you
05:41:10 20 had from Wells Fargo?
05:41:11 21 A. I did. I did it for -- for -- for each year. And
05:41:18 22 Wells Fargo provided information on the frequency of teller
05:41:21 23 deposits versus ATM documents. So I took the information
05:41:25 24 that Wells Fargo provided and -- and made these kinds of
05:41:30 25 calculations.

05:41:30 1 Q. And how did you use this information to come up with
05:41:34 2 total channel optimization cost savings?

05:41:38 3 A. I did the math, took all that information, and when you
05:41:44 4 did this kind of calculation for the entire damage period,
05:41:49 5 the total damages associated with what's called channel
05:41:52 6 optimization, namely the cost savings associated with
05:41:56 7 mobile deposits, are \$302 million. That is the cost
05:42:01 8 savings that Wells Fargo obtained by virtue of mobile
05:42:06 9 deposits relative to ATMs and teller deposits.

05:42:12 10 Q. And this exhibit that we're looking at is Plaintiff's
05:42:16 11 Exhibit 28; is that correct?

05:42:17 12 A. Yes, sir.

05:42:17 13 Q. Okay. So can you tell us about the other category of
05:42:21 14 cost savings?

05:42:22 15 MR. BUNT: Let's go to the next slide. There we
05:42:24 16 go.

05:42:24 17 A. So the second category that I mentioned was the fact
05:42:27 18 that with all these mobile deposits, the bank needs future
05:42:31 19 branches, and branches cost money to build.

05:42:36 20 So, again, I took -- I took information from Wells
05:42:41 21 Fargo which allowed me to determine the volume of mobile
05:42:44 22 deposits that would have been made with a teller after
05:42:48 23 subtracting out those 20 percent new deposits because they
05:42:52 24 get those anyway. And so they -- they shouldn't be
05:42:54 25 included. And that came to approximately 25, 26 million

05:43:02 1 mobile deposits in the number -- the year is 2018 -- for
05:43:08 2 that year.

05:43:12 3 Based on the number of checks a branch can process
05:43:15 4 in a -- in a given year, that comes to an additional 184
05:43:21 5 branches that are not needed by virtue of mobile deposits,
05:43:26 6 as opposed to the need for branches.

05:43:30 7 And at a construction cost of approximately just a
05:43:33 8 million -- a million five per branch, and that does not
05:43:37 9 include the land or the people but just -- just includes
05:43:41 10 the building and equipment, that is a savings from not
05:43:45 11 having to have those branches of \$276 million to Wells
05:43:50 12 Fargo.

05:43:50 13 MR. BUNT: So if we could go to the next slide.

05:43:53 14 Q. (By Mr. Bunt) So how did you calculate the capital
05:43:55 15 cost savings for this period of damages that we're talking
05:43:57 16 about, December 15th of 2016 up until trial?

05:44:01 17 A. Right. So the figures on the last slide amount to
05:44:07 18 75 cents per deposit in savings, and I multiplied that
05:44:12 19 times the number of mobile deposits during the damage
05:44:15 20 period so that the capital cost savings to Wells Fargo is
05:44:20 21 approximately \$174 million. That's just from not having to
05:44:24 22 build all these extra branches.

05:44:26 23 Q. And so the second line, the total number of mobile
05:44:29 24 deposits from December 15th, 2016, until now, that's how
05:44:34 25 many?

05:44:34 1 A. 232 million.

05:44:38 2 Q. Okay. So could you describe to the jury how you

05:44:41 3 calculated total cost-savings benefits to Wells Fargo?

05:44:45 4 A. So the total cost savings were the \$302 million

05:44:50 5 associated with the fact that it costs less for Wells Fargo

05:44:55 6 to process a mobile deposit than an ATM or a teller

05:45:01 7 deposit, plus the capital cost savings of \$174 million

05:45:06 8 associated with the fact that they don't need those extra

05:45:08 9 branches, producing a total cost savings of approximately

05:45:11 10 \$476 million.

05:45:16 11 Q. And then the third category -- or the second category

05:45:19 12 of benefits that you were looking at was increased profits;

05:45:23 13 is that correct?

05:45:23 14 A. Yes, sir.

05:45:26 15 MR. BUNT: And so let's go to the next slide.

05:45:30 16 Q. (By Mr. Bunt) How much here?

05:45:31 17 A. Once again, for the damages period, the increased

05:45:35 18 profits made from mobile deposits are approximately \$316

05:45:45 19 million.

05:45:45 20 Q. And can you walk the jury how you came up with these

05:45:48 21 increased profits?

05:45:50 22 MR. BUNT: Can you go to the next slide?

05:45:51 23 A. So Wells Fargo provided information on average

05:45:57 24 profitability that it obtains from checking accounts. That

05:46:03 25 information was provided by year, including all years in

05:46:09 1 the damages period. So what I did is I took that
05:46:14 2 information, and the year that's shown here is 2018. This
05:46:18 3 is just one year. I took that information.

05:46:22 4 The average profit in that year, as provided by
05:46:25 5 Wells Fargo per checking account, was about \$94.00. 14
05:46:30 6 percent of deposits were mobile deposits. And so what I
05:46:37 7 did is multiply that 14 percent times the \$94.00 average
05:46:43 8 profit in order to get profit attributed to mobile
05:46:47 9 deposits, \$13.29.

05:46:50 10 The last step of this calculation was to multiply
05:46:54 11 that \$13.29 times the number of mobile deposit accounts
05:46:59 12 that year, approximately 10.9 million, so that the profits
05:47:04 13 from mobile deposits in 2018 are \$145 million to Wells
05:47:12 14 Fargo.

05:47:12 15 And then I do the same step for the other years in
05:47:15 16 the damage period, and total profits from mobile deposits
05:47:18 17 using that same methodology are approximately \$316 million.

05:47:24 18 Q. So let's turn to the last category of damages which are
05:47:30 19 the ecosystem benefits. Can you explain to us how you
05:47:33 20 calculated those?

05:47:34 21 A. Yes. This is an easier calculation to describe.
05:47:41 22 Again, during the damage period, I used the same figures
05:47:44 23 for mobile deposits, 232 million mobile deposits, and both
05:47:51 24 I and Wells Fargo's damage expert, essentially, agree with
05:47:56 25 those numbers. I took the east -- ecosystem benefit which

05:47:59 1 I believed to be 60 cents as a -- as a useful benchmark.

05:48:04 2 And when you do that 60-cent per deposit ecosystem

05:48:11 3 benefit, namely to brand name and reputation and deal with

05:48:14 4 the customers' pain points, the ecosystem benefits are

05:48:17 5 approximately \$139 million.

05:48:21 6 Q. So are the USAA patents responsible for all of the

05:48:27 7 benefits that you have just quantified?

05:48:30 8 A. No, sir.

05:48:32 9 Q. So how did you go about figuring out what was

05:48:36 10 attributable to the United -- to the USAA patents?

05:48:39 11 A. Right. As I said earlier, I start with the benefits

05:48:44 12 associated with MRDC, and that's what's shown on the

05:48:49 13 left-hand side of this slide. And those are the figures

05:48:52 14 that I've been describing.

05:48:53 15 And then what I do is I apportion down to the

05:48:56 16 contribution of USAA's two patents-in-suit. And based on

05:49:03 17 Mr. -- Mr. Calman's research, which we just heard about,

05:49:07 18 that apportionment rate conservatively, according to him,

05:49:12 19 is -- is 40 percent.

05:49:13 20 And so what I do is I take the MRDC patents from

05:49:19 21 auto-enabled MRDC benefits to Wells Fargo, and I multiply

05:49:25 22 that -- those benefits times the apportionment factor of

05:49:30 23 40 percent. And so the benefits then that are attributable

05:49:35 24 to the patent-in-suit are shown on the right-hand side

05:49:39 25 of -- of this demonstrative, and they -- they amount to

05:49:44 1 \$373 million, which you saw right at the beginning of my
05:49:48 2 testimony. And those are the benefits that reflect the
05:49:51 3 contribution of the patents-in-suit to all of the benefits
05:49:57 4 associated with MRDC at Wells Fargo during the damage
05:50:02 5 period.

05:50:02 6 Q. And are you aware of any evidence that supports
05:50:05 7 Mr. Calman's 40 percent apportionment factor?

05:50:11 8 A. Yes.

05:50:11 9 Q. And why do you use that as a figure, and do you believe
05:50:14 10 that to be a conservative estimate?

05:50:16 11 MR. BUNT: Let's go to the next slide.

05:50:19 12 A. I -- I do. It's a conservative estimate for at least
05:50:23 13 the reasons that are summarized on this slide. We saw
05:50:26 14 Mr. Saffici's testimony that auto capture is acknowledged
05:50:30 15 as the foundation for mobile check deposit successful;
05:50:38 16 Mr. Ajami's testimony that auto capture must be treated as
05:50:41 17 must-have feature; and that Futurion Report that basically
05:50:44 18 says if -- if mobile deposit doesn't work right, customers
05:50:50 19 are going to look for another bank.

05:50:52 20 Q. (By Mr. Bunt) So now that you've determined that 40
05:50:55 21 percent of the quantifiable benefits of the accused MRDC
05:50:59 22 system are attributable to the patents-in-suit, how did you
05:51:02 23 arrive at your final damages figure?

05:51:05 24 A. Well, there's one more step. Once you get to the point
05:51:09 25 that the patents-in-suit account for approximately \$373

05:51:14 1 million in benefits to Wells Fargo, the final step involves
05:51:24 2 determining how that bundle of benefits is going to be
05:51:28 3 split at the hypothetical negotiation that we started with
05:51:31 4 between Wells Fargo and USAA. And understand, as I said at
05:51:34 5 the beginning, at the hypothetical negotiation, one of the
05:51:37 6 things that the parties know is about the benefits that are
05:51:41 7 going to reflect use of the functionality by the infringing
05:51:47 8 entity.

05:51:48 9 And so they're aware of these \$373 million in
05:51:53 10 benefits, and now the final step here is, well, where do
05:51:57 11 they wind up at the end of this hypothetical negotiation?
05:52:00 12 That's the last step.

05:52:02 13 MR. BUNT: Mr. Huynh, can we have the next slide?
05:52:05 14 A. Well, this final slide -- well, semifinal slide --
05:52:08 15 reflects my conclusion as to the output -- as to the
05:52:13 16 outcome of the hypothetical negotiation, only those
05:52:16 17 benefits.

05:52:16 18 The pie represents the \$373 million in benefits,
05:52:20 19 and I've concluded that Wells Fargo would negotiate for its
05:52:26 20 return on equity, that is, the amount of money it makes on
05:52:30 21 the equity that it has at about the time of the
05:52:34 22 hypothetical negotiation, and that's approximately \$73
05:52:39 23 million. That way it's getting the same benefit from these
05:52:43 24 patents as it gets on its other amount. All right.

05:52:46 25 Q. (By Mr. Bunt) How much would USAA receive of that \$373

05:52:50 1 million?

05:52:50 2 A. USAA gets the rest, roughly \$299 million, and that's

05:52:55 3 the damage number that I've -- that I've ultimately

05:52:57 4 concluded would be the outcome of the hypothetical

05:53:01 5 negotiation.

05:53:01 6 Q. So your final determination on the damages adequate to

05:53:05 7 compensate USAA for infringement of the patents-in-suit by

05:53:10 8 Wells Fargo is \$299.8 million; is that correct?

05:53:13 9 A. Yes, sir.

05:53:14 10 Q. Thank you, sir.

05:53:15 11 MR. BUNT: I'll pass the witness.

05:53:18 12 THE COURT: Ladies and gentlemen, before the

05:53:21 13 Defendant cross-examines the witness, we're going to recess

05:53:23 14 for the evening.

05:53:24 15 We'll begin with the Defendant's cross-examination

05:53:26 16 of this witness tomorrow.

05:53:28 17 I'm going to ask you to close your notebooks and

05:53:32 18 leave them on the table in the jury room as you exit the

05:53:34 19 courthouse.

05:53:36 20 I'll remind you to follow all the instructions

05:53:38 21 that I've given you throughout the trial, including, of

05:53:41 22 course, as you would expect me to remind you, not to

05:53:43 23 discuss the case with anyone.

05:53:45 24 If you will attempt to be back tomorrow morning,

05:53:48 25 just as you did today -- we did not start quite at 8:30.

05:53:51 1 That's on our side of the fault, not yours, but we will try
05:53:54 2 to do better tomorrow. And if you'll get here in time so
05:53:58 3 that you can be assembled and ready to go by 8:30, I would
05:54:00 4 appreciate it.

05:54:01 5 Have a good evening, ladies and gentlemen. The
05:54:03 6 jury is excused for the evening at this time.

05:54:05 7 COURT SECURITY OFFICER: All rise.

05:54:06 8 (Jury out.)

05:54:27 9 THE COURT: Are either Plaintiff or Defendant
05:54:29 10 aware of anything that should be taken up before we recess
05:54:31 11 for the evening?

05:54:33 12 MR. SHEASBY: Nothing from Plaintiffs, Your Honor.

05:54:34 13 MR. BUNT: Yes, yes, there is something from the
05:54:36 14 Plaintiffs.

05:54:37 15 MR. SHEASBY: Something for Plaintiffs, Your
05:54:40 16 Honor.

05:54:40 17 THE COURT: You may step down, Mr. Weinstein.

05:54:43 18 THE WITNESS: Thank you, sir.

05:54:44 19 MR. BUNT: I know Your Honor instructed us to have
05:54:47 20 jury instructions to you by noon tomorrow, and I was hoping
05:54:51 21 to beg for the indulgence of the Court on behalf of
05:54:54 22 everybody here. Would it be possible for us to have those
05:54:57 23 to you, say, by noon on Saturday instead? The reason being
05:55:02 24 that I think we're going to have a lot more opportunity to
05:55:04 25 make headway tomorrow afternoon while the Court is at the

05:55:08 1 investiture proceeding, and I think we could get a more
05:55:12 2 polished product to you by Saturday.

05:55:14 3 THE COURT: I gather the Defendant joins in that?

05:55:18 4 MR. HILL: Yes, Your Honor.

05:55:19 5 MR. BUNT: They threw me under the bus and told
05:55:22 6 me --

05:55:22 7 MR. MELSHEIMER: We join enthusiastically,
05:55:26 8 Your Honor.

05:55:26 9 MR. SHEASBY: I objected, Your Honor.

05:55:27 10 THE COURT: Well, I'll move it from noon on Friday
05:55:30 11 to 5:00 p.m. on Friday, and I'll also instruct that, in
05:55:34 12 addition to filing a PDF with the clerk's office, you're to
05:55:38 13 email a Word version to my staff so that we'll have it in
05:55:42 14 Word form.

05:55:43 15 Is there anything else to take up before we
05:55:45 16 recess?

05:55:46 17 MR. SHEASBY: Nothing from Plaintiffs, Your Honor.

05:55:48 18 MR. MELSHEIMER: Nothing -- nothing, Your Honor.

05:55:50 19 Thank you.

05:55:50 20 THE COURT: All right. We will read exhibits into
05:55:52 21 the record before I bring in the jury in the morning.

05:55:56 22 The Court stands in recess until tomorrow.

05:56:00 23 COURT SECURITY OFFICER: All rise.

05:56:01 24 MR. SHEASBY: Thank you, Your Honor.

25 (Recess.)

1 CERTIFICATION
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4 I HEREBY CERTIFY that the foregoing is a true and
5 correct transcript from the stenographic notes of the
6 proceedings in the above-entitled matter to the best of my
ability.

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9 /S/ Shelly Holmes _____
10 SHELLY HOLMES, CSR, TCRR
OFFICIAL REPORTER
State of Texas No.: 7804
11 Expiration Date: 12/31/20

10/31/19
Date

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